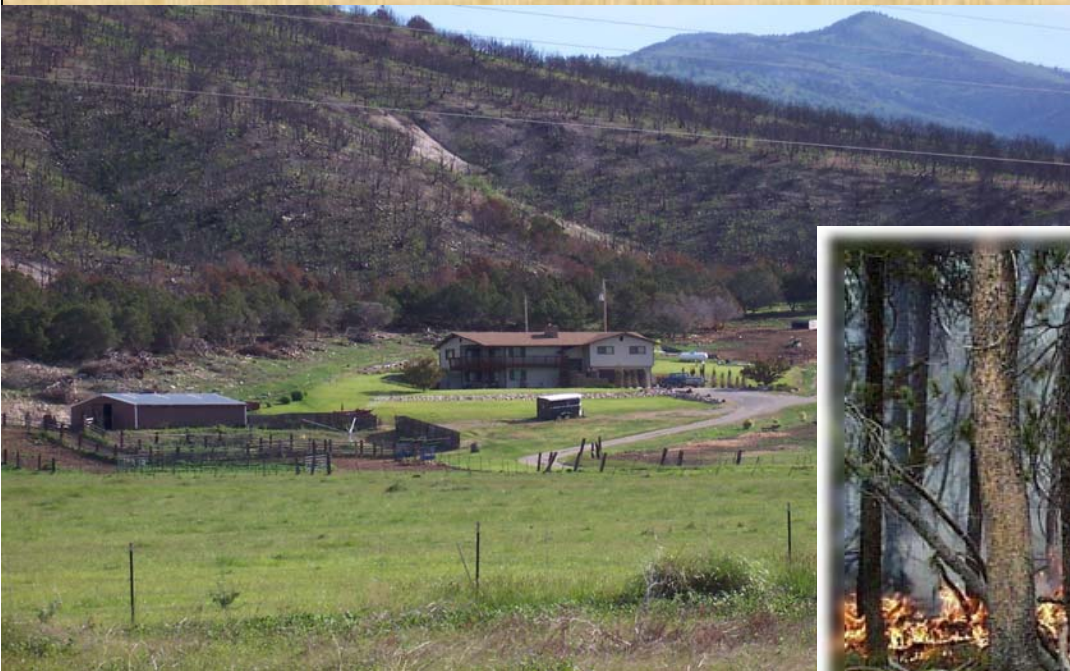


Wildland Fire Mitigation Plan Caribou County, Idaho

**October
2004**



Prepared for:

Caribou County Commissioners
County Courthouse
Soda Springs, Idaho 83276



Prepared by:

W.H. West & Associates
5963 W. Broadway
Idaho Falls, Idaho 83402

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Table of Contents

Executive Summary	vii
Introduction.....	1
Caribou County Profile.....	3
Current Population and Population Trends.....	4
Shoshone-Bannock Tribe/Ft. Hall Reservation	4
Climate.....	4
Vegetation.....	5
Geology.....	7
Soils.....	8
Wildlife	8
Archeological and Historic Sites	10
Hydrology	11
Transportation and Commuting	12
Aviation Facilities.....	13
Emergency Services.....	13
Wildfire Hazard Components	14
2001 Soda Springs Wildfire Risk Assessment.....	15
Idaho State University Wildland Fire Model.....	15
Caribou County Wildland/Urban Interface Assessment.....	15
Wildfire Fuels in Caribou County.....	15
Caribou County Weather	16
Drought	18
Caribou County Topography	18
Other Hazard Issues	19
Bear River RC&D Fire Department Assessment for Caribou County	21
Hazard Location.....	22
Caribou County Wildland/Urban Interface (WUI).....	22
Values at Risk	23
Hazard Prioritization.....	24
Mitigation Goals and Strategy	25
Actions to Achieve Mitigation Goals	26
Goal 1: Increase the opportunities and availability for the citizens of Caribou County to increase their knowledge and application of firewise activities and techniques to reduce the risk and impact of wildfires.....	26
Goal 2: Complete and integrate planning activities and develop and implement ordinances appropriate for the county to reduce damage to life, property and values within Caribou County due to wildland fire	32
Goal 3: Provide additional sources of water at strategic locations throughout Caribou County and means of supplementing or replacing service in the event of disruption.	44
Goal 4: Improve existing access where feasible and plan new roads and access routes with wildfire suppression needs in mind.....	47
Goal 5: Reduce identified hazardous fuels buildup in high-risk areas.	49
Goal 6: Provide Caribou County VFDs with required training, communications, Personal Protective Equipment (PPE), Apparatus, Facility improvements and	

equipment to maintain or improve wildland fire fighting preparedness, capability and response times	52
Existing Mitigation Programs and Resources	57
Local Programs	57
County Codes	57
State (IDL) Programs	57
Federal Programs	57
National Wildland/Urban Interface Fire Protection Program	58
Prescribed Burning/Mechanical/Biological Treatment	58
Firewise	58
Wildfire Mitigation Plan Maintenance	59
Continued Public Involvement	59
Appendix A: Maps	60
Appendix B: Team Meetings and Public Participation	74
Wildfire Questionnaire Used For Public Input.	75
News Releases	79
Team Meeting #1	84
Public Participation #1	87
Team Meeting #2	89
Team Meeting #3	95
Public Participation #2	99
Public Participation #3	100
Team Meeting #4	105
Public Participation #4	109
Public Comment Period	109
Appendix C: Cost Comparison	111
Appendix D: Financial/Technical Resources	113
Appendix E: List of Acronyms	114

ADOPTION BY THE CARIBOU COUNTY COMMISSIONERS

Bart Conlin

Date


Bruce Dredge

Date

Lloyd Rasmussen

Date

Recommended by Caribou County Wildfire Mitigation Group



Dennis Godfrey, Caribou County Emergency
Services

4 Oct 04

Date



Josse Allen, Caribou County Assessor's Office

Oct 4th, 2004

Date

Verbal approval via phone to W. West

Keith Birch, Idaho Department of Lands

Oct 4, 2004

Date

Dave Whittekiend, U.S. Forest Service

Date

Verbal approval via phone to W. West

Bill Swann, Bureau of Land Management

Oct 4, 2004

Date

Teryl Parsons, Bancroft VFD

Date

Date

Date

Date

Date

Reviewed By

Kevin P. Conran
Kevin Conran, Bureau of Land Management

10/4/2004
Date

Verbal approval via phone to W. West
Jared Mattson, U.S. Forest Service

Oct 4, 2004
Date

Executive Summary

The Caribou County Wildfire Mitigation Plan objective is to provide Caribou County residents, public and private organizations with assistance and recommendations to mitigate wildfire risk and hazard vulnerability presented by wildfires within Caribou County. This objective is reached by public and official participation identifying and documenting areas of high and medium risk to wildfire hazards. Actions identified to decrease wildfire risk and hazards within Caribou County are focused on public safety, emergency services, county infrastructure, natural resources, and property protection.

The Caribou County Wildfire Mitigation Plan will tier to the Idaho State Implementation Strategy for the National Fire Plan. The FEMA Local Hazard Mitigation Plan Worksheet was used for plan formulation, and Target Dates. Development and review of the plan was accomplished by the Caribou County Wildfire Mitigation Planning Group with participation from Federal, State, County agencies and private citizens.

Public participation was accomplished by public workshops, distribution of questionnaires regarding wildfire concerns and suggestions, participation by homeowners, and utilization of contractor-collected public input.

The priorities of the plan were developed by the Caribou County Wildfire Mitigation Planning Group and are standard priorities for most risk assessments, hazard reduction activities and wildfire incidents:

1. Protection of Life: Identify and provide mitigation recommendations for areas of high wildfire risks that are in or adjacent to homes and communities, and improve critical county infrastructure facilities.
2. Protection of Property: Identify and provide mitigation recommendations for properties of moderate and high wildfire risk. Increase public awareness through education, training and information sharing addressing wildfire risks and mitigation measures.
3. Protection of Resources: Identify resources that are at risk to wildfires and implement natural resource planning to protect these resources. To include protection and mitigation of at risk watersheds, vegetation, fish, wildlife and maintain soil stability.
4. Values: Scenic, historical, cultural.

Implicit in these priorities are the need to:

Improve Wildfire Emergency Services: Improve county infrastructure and wildfire emergency service planning, training, communications, and equipment.

Increase Public Awareness of Wildfire Prevention: Increase public awareness of firewise practices and wildfire prevention through education training and information sharing.

Improve Partnerships for Implementation: Utilize partnerships currently established and develop additional participation with State, Federal, and private organizations.

The following table shows the total number of high, medium and low priority actions in each mitigation goal.

Table 1. Number of Mitigations Actions by Priority

Mitigation Goal	Priority		
	High	Med	Low
<i>Goal 1:</i> Increase the opportunities and availability for the citizens of Caribou County to increase their knowledge and application of firewise activities and techniques to reduce the risk and impact of wildfires.	5	9	0
<i>Goal 2:</i> Complete and integrate planning activities and develop and implement ordinances appropriate for the county to reduce damage to life, property and values within Caribou County due to wildland fire.	6	6	1
<i>Goal 3:</i> Provide additional sources of water at strategic locations throughout Caribou County and means of supplementing or replacing service in the event of disruption.	2	4	0
<i>Goal 4:</i> Improve existing access where feasible and plan new roads and access routes with wildfire suppression needs in mind.	4	0	0
<i>Goal 5:</i> Reduce identified hazardous fuels buildup in high-risk areas.	3	2	0
<i>Goal 6:</i> Provide Caribou County VFDs with required training, communications, Personal Protective Equipment (PPE), Apparatus, Facility improvements and equipment to maintain or improve wildland fire fighting preparedness, capability and response times.	4	8	0

The Top Priority Mitigation Actions table (Table 2) presents the actions, in priority order based on the impact on the plan objectives, and the mitigation goal to alleviate the hazard. Only mitigation actions considered as high priority are included in the table. All mitigation actions can be found in the hazard mitigation section of this plan.

Each mitigation action includes an estimated cost for implementation. The implementation actions provide sources and resources for the implementation of the goal. These may include various potential grant or funding sources and organizations that could provide expertise or assistance for goal implementation.

As the administrators of the Caribou County Wildfire Mitigation Plan, the Caribou County Board of Commissioners are the authority and have the responsibility to adopt the plan.

The plan maintenance section includes recommendations for annual plan review and monitoring. A bi-annual re-evaluation of priorities for action items and progress is also

recommended. A total plan revision should be conducted every five years. This plan maintenance will be directed by the Caribou County Commissioners, and coordinated with the Caribou County Disaster Services Specialist and the Caribou County Volunteer Fire Fighters. In addition, participation will be needed by various positions represented in the Caribou County Wildfire Mitigation Group, coupled with public input.

An economic analysis template/direction examining potential loss as a result of wildfires in Caribou County is provided in Appendix C. Though total potential loss to catastrophic wildfires is variable by year, the cost/effectiveness of fuel treatments, county infrastructure improvements, and emergency wildfire services improvements will provide benefits to the primary objectives: protection of life and property.

Table 2. Top Priority Mitigation Actions

MITIGATION		ACTION		
Goal	Priority	Description	Cost	
Goal 1: Increase the opportunities and availability for the citizens of Caribou County to increase their knowledge and application of firewise activities and techniques to reduce the risk and impact of wildfires.	1	1.5 - The county will conduct annual FIREWISE community cleanup days and provide incentives for communities such as free dump days at the county landfill for fuel reduction debris or providing a chipper to dispose of debris.	\$5,000	
	2	1.7 - Promote implementation of the FIREWISE Community program in selected areas of the County.	\$1,250	
	4	1.2 - Ensure that all parties operating under the mutual aid agreements understand the agreements and are knowledgeable about the policies and capabilities of their own department and those departments with whom they have agreements.	\$0	
	7	1.6 - The county will identify homes and make contacts with homeowners who are interested in fuels reduction to volunteer their property to be used as a defensible space demonstration project to educate other adjacent homeowners.	\$3,000	
	8	1.3 - The fire service agencies will work with homeowner's associations to review restrictive covenant requirements to bring these covenants in line with enabling homeowners to implement defensible space guidelines.	\$0	
Goal 2: Complete and integrate planning activities and develop and implement ordinances appropriate for the county to reduce damage to life, property and values within Caribou County due to wildland fire.	11	Schedule annual educational events at schools and communities prior to and during fire season.	\$2,000	
	3	2.7 - The County will work with planning and zoning to enact, as appropriate, building and development standards and codes for fire protection for residential development in the Wildland/Urban Interface for subdivisions as identified in NFPA 1144, Standard for Protection of Life and Property from Wildfire, 2002 edition and the NFPA 1141, Standard for Fire	\$0	

MITIGATION		ACTION		
Goal	Priority	Description	Cost	
		<i>Protection in Planned Groups, 1998 edition.</i>		
	5	2.2 - Ensure that mutual aid agreements are in place between governments and/or agencies and agreements have been updated and renewed as necessary.	\$0	
	6	2.13 - Adopt and maintain of a multi-agency operational plan for the protection of lives and property during wildland fires. The primary goal of the plan shall be to protect people in the fire area, including emergency personnel responding to the incident, from injury or loss of life. A secondary objective shall be to minimize or eliminate property loss from wildland fire.	\$5,000	
	10	2.5 - Improve the paging of multiple agencies, through use of a central dispatch, to ensure deployment of closest forces in the event of a wildland fire.	\$2,500	
	18	2.4 - Formalize mutual aid agreements between Caribou County and Franklin, Bear Lake and Bonneville counties.	\$0	
	21	2.3 - Sign a mutual aid agreement between BLM and the Grace VFD.	\$0	
Goal 3: Provide additional sources of water at strategic locations throughout Caribou County and means of supplementing or replacing service in the event of disruption.	16	3.1 - Continue to locate (using GPS) and document (type of source and reliability) potential water sources available at farms and homes in the County. Including potential water drafting sites. Annually update the information and provide to organizations and agencies conducting fire suppression operations in the County.	\$800	
	17	3.6 - Developers of new subdivisions shall provide a water supply for wildland fire fighting.	\$0	
Goal 4: Improve existing access where feasible and plan new roads and access	12	4.3 - Develop alternative escape routes for the Bailey Creek area.	\$2,000	

MITIGATION		ACTION	
Goal	Priority	Description	Cost
routes with wildfire suppression needs in mind.	15	4.1 - Post evacuation plans at central locations for sub-divisions (e.g. in a locked pipe at the entrance to a subdivision showing all home locations and indicating special need locations).	\$1,000
	19	4.2 - As funds permit, install turnouts or turn-arounds on those roads identified on the Caribou County Wildland Urban Interface Assessment of 2004 as having restricted access.	TBD
	20	4.4 - In cooperation with Idaho Transportation Department, Caribou County Highway Department, and the Caribou County Sheriff's Department, develop a pre-plan for evacuation management, to include pre-designation of evacuation routes, emergency road closures or restrictions, and traffic flow control.	\$25,000
	9	5.3 - Conduct fuel reduction activities in priority areas identified on Map12 of Appendix A. In designated areas, coordinate reduction activities on private land with planned activities by the Bureau of Land Management and Forest Service to maximize treatment efficiency, benefit and to complement activities on public land.	TBD
Goal 5: Reduce identified hazardous fuels buildup in high-risk areas.	14	5.4 - Develop a hazardous fuels reduction plan for perimeters of CRP fields or around buildings to create firebreaks that will reduce the potential threat from a wildfire.	\$2,500
	23	5.1 - Persons owning, leasing, controlling, operating or maintaining buildings or structures requiring defensible spaces are responsible for modifying or removing non fire-resistive vegetation, and maintaining defensible spaces, on the property owned, leased or controlled by said person.	\$0
Goal 6: Provide Caribou County VFDs	13	6.10 - Acquire a heavy engine for wildland fire situations.	\$160,000

MITIGATION		ACTION	
Goal	Priority	Description	Cost
with required training, communications, Personal Protective Equipment (PPE), Apparatus, Facility improvements and equipment to maintain or improve wildland fire fighting preparedness, capability and response times.	22	6.11 - Improve the communication network in the county by identifying “dead” spots and installing additional radio repeater sites in those areas for emergency communications.	\$35,000
	24	6.5 - Provide wildfire training opportunities (including use of computer-based training) to VFD’s and interested citizens. Coordinate with USFS/BLM for wildfire training and utilize the BLM Rural Fire Assistance program.	\$3,200
	25	6.3 - Acquire a 1000 gal. first response truck for the Bancroft Rural Fire Dept.	\$30,000

Introduction

The Caribou County Wildfire Mitigation Plan was initiated by the Caribou County Commissioners, Caribou County, Idaho in March, 2004. The Commissioners required that the plan contain:

- Documentation of the process used to develop the plan.
- A risk assessment to identify vulnerabilities to wildfire in the wildland urban interface.
- A prioritized mitigation strategy that addresses each of the risks.
- A process for maintenance of the plan.
- Documentation that the plan has been formally adopted by the involved agencies.

The county emergency services coordinator further desired the plan to:

- Coordinate with the Idaho State Strategic Plan for the implementation of the National Fire Plan, and
- Utilize the format developed for all hazard mitigation plans provided by the Federal Emergency Management Agency (FEMA).

The Caribou County plan is based on information, research, and data from numerous county, state, federal and private sources. Caribou County contracted W.H. West & Associates as the coordinator of the Caribou County Wildfire Mitigation Group and plan developer.

The Caribou County Wildfire Mitigation Group conducted periodic meetings from May, to September, 2004. Development of the Caribou County Wildfire Mitigation Plan was achieved through coordination with the Caribou County Wildfire Mitigation Group. *The Caribou County Sun*, published progress reports and informative articles after some planning team meetings, including phone numbers and e-mail addresses for public input, or participation.

Research data and wildfire hazard models provided by Idaho State University have also been used in the plan formulation. The information and data gathered by W.H. West & Associates included four public meetings in different areas of Caribou County. A wildfire hazard questionnaire was used to collect information from residents and was made available to residents during public meetings and at the County Emergency Services office and local Volunteer Fire Departments. An example of the questionnaire is located in Appendix B. Numerous stakeholder interviews were conducted as part of the public meetings. A list of Caribou County stakeholders attending public meetings is also in Appendix B. Evaluation of wildfire hazards on Federal and State lands utilized a fire hazard rating system based on fuels type, condition and density, combined with slope, aspect and fire suppression response time. This rating system identified high-risk areas and was developed by the Idaho State University and Bureau of Land Management fuels specialists.

Priorities for the Caribou County Wildfire Mitigation plan are:

1. Protection of Life: Identify and provide mitigation recommendations for areas of high wildfire risks that are in or adjacent to homes and communities, and improve critical county infrastructure facilities.
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Caribou County Profile

Caribou County encompasses a diverse landscape of irrigated valleys, lava fields, foothills, and mountains within its 1,799 square miles. The Portneuf Range, which crests at Bonneville Peak, forms the county's western border with Bannock County. East of the Portneuf Range lay the Portneuf and Gem Valleys. The Portneuf valley is drained by the Portneuf River, which flows south and west into Bannock County. Gem Valley and the areas south of Grace, toward the Franklin County line, are drained by the Bear River.

East of the Portneuf and Gem Valleys, Caribou County's landscape becomes complex. A series of northwest-southeast trending mountain ranges alternates with valleys drained by the Blackfoot river, which flows north into Bingham County, and other streams that flow east and north into the Star Valley of Wyoming. The central portion of the county includes the Blackfoot Lava Field. Blackfoot Reservoir and Gray's Lake National Wildlife Refuge are located in the northern portion of the county.

Caribou County is supported economically by two major industries: agriculture and mining.

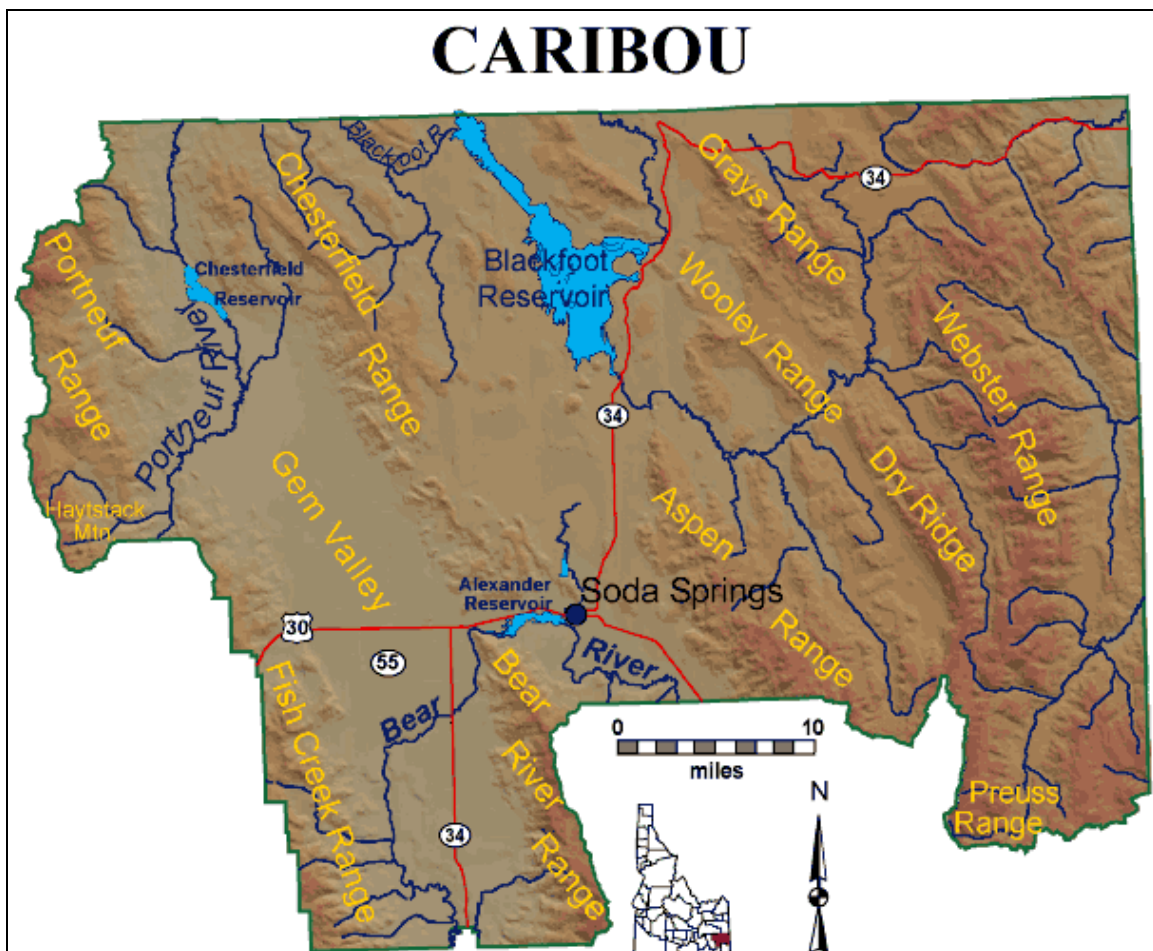


Figure 1. Caribou County

The total land area of Caribou County is approximately 1,130,304¹ acres. Private lands comprise about 50% of that acreage (567,127 acres). Roughly 10% of the county is included in State ownership (112,578 acres) and 39.6% (447,779 acres) is in Federal ownership. The northwest corner of the county is in the Ft. Hall Indian Reservation. Pubic lands, most of which are managed by the Caribou National Forest, are concentrated in the mountain ranges of the eastern portion of the county. The county's Public Lands are generally leased for grazing, while virtually all private lands are used for crop production or grazing (Appendix A, Map 1 Land Status).

Current Population and Population Trends

Caribou County's population has experienced some change in recent decades.

Population, 2001 estimate ²	7,397
Population percent change, April 1, 2000-July 1, 2001	1.3%
Population, 2000	7,304
Population, percent change, 1990 to 2000	4.9%

The largest community in Caribou County is the county seat, Soda Springs, with a population of about 3,381 residents. Caribou County has two other population centers in Grace with a population of 990 and Bancroft with a population of 382 residents.

Several eastern Idaho counties (including Bingham, Butte, and Oneida) experienced overall population growth, but a decline in their urban population share during the 1980s. That trend toward exurban residential development was also evident in Caribou County, where the urban portion of the population fell from 46.6% to 41.9% from 1980 to 2000.

Shoshone-Bannock Tribe/Ft. Hall Reservation

Roughly 3% of the county is included within the Fort Hall Indian Reservation (37,643 acres). Caribou County is fully within the Tribes' aboriginal homeland. In fact, archaeological evidence indicates that American Indians occupied it for at least 12,000 years. The Fort Bridger Treaty of 1868 secured the Fort Hall Reservation as the permanent homeland of the Shoshone-Bannock Tribes. But the aboriginal rights reserved by the treaty extend to unoccupied lands of the United States, reserving hunting, fishing, and gathering rights for tribal members.

Climate

The area's semi-arid climate is the result of the Cascade and Sierra mountains to the west and the Bitterroot and Rocky Mountains to the north that effectively block Pacific moisture. The success of local agriculture is dependent on spring runoff from the snow pack, summer thunderstorms, and irrigation from both deep wells and surface water.

¹ <http://www.idoc.state.id.us/idcomm/profiles/pdfs/Caribou.pdf>

² US Census Bureau, Quick Facts for Caribou County, Idaho (<http://quickfacts.census.gov/qfd/states/16/16029.html>)

Summer may begin suddenly with a rapid change to warm and dry weather, but chilly nights can persist into early July. Showers and/or thunderstorms are common from late spring through summer. These storms often produce very localized precipitation. Brief heavy rain, lightning, small hail, and gusty winds may cause very localized damage at times. Long periods of excessively hot weather in July and August are uncommon. Afternoon temperatures often rise into the 90s, however low humidity usually results in overnight temperatures in the 50s or even cooler.

During winter, brisk southwesterly winds often persist for days or weeks. These winds may moderate cold winter conditions, producing unusually mild temperatures compared to surrounding areas. There are usually a number of days each winter when temperatures remain below freezing. Sub-zero temperatures usually occur only a few days each winter. During especially cold outbreaks, snowfall may accumulate to a depth of a foot or more. Cloudy and unsettled weather is common during the winter with measurable precipitation occurring on about one-third of the days.

Spring months are normally wet and windy. Winds of 20 to 30 mph may persist for days at a time. Weather conditions fluctuate quickly during the spring. Thunderstorms are not uncommon, and are usually accompanied by rain showers and occasional snow. Autumn ushers in cooler weather with daytime highs generally in the 70s in early fall dipping into the mid 40s by mid November with generally dry conditions. Autumn storms are usually very fast moving, and seldom persist for more than a few days.³

Table 3. Soda Springs Monthly Climate Summary⁴

Period of Record: 6/ 1/1978 to 12/31/2003

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	30.5	32.6	41.8	53.9	63.7	73.8	83.7	82.8	72.2	59.0	41.2	31.1	55.5
Average Min. Temperature (F)	8.9	10.2	19.1	26.4	34.2	39.8	44.6	44.1	36.0	26.4	18.4	8.7	26.4
Average Total Precipitation (in.)	1.12	1.14	1.36	1.30	2.28	1.32	1.27	1.26	1.27	1.14	1.19	1.07	15.72
Average Total SnowFall (in.)	11.3	8.6	7.8	3.3	0.5	0.1	0.0	0.0	0.0	1.0	5.7	10.1	48.4
Average Snow Depth (in.)	8	9	4	0	0	0	0	0	0	0	1	5	2

Vegetation⁵

Plant communities in the county included mixed aspen/conifer forest, conifer, sagebrush/grassland, aspen forest, and riparian/wetlands. There are also extensive agricultural areas throughout the county, most of which is irrigated farmland.

³ From National Weather Service, Pocatello Station web site.
<http://www.wrh.noaa.gov/Pocatello/climate/descrip.html>

⁴ <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?idsoda>

⁵ March, 2003. Draft Environmental Impact Statement North Rasmussen Ridge Mine. Bureau of Land Management.

The mixed aspen and conifer forest community can be found on all aspects and overlaps both conifer and sagebrush/grassland communities. The community is characterized by open stands of aspen and conifer, with occasional areas of dense aspen or snowberry.

The conifer forest plant community occurs at higher elevations along ridgetops and on west-facing slopes. Dominant species in conifer forest include lodgepole pine, Douglas fir, and subalpine fir. Understory in the conifer forest includes a variety of shrubs as well as pinegrass and elk sedge. Canopy cover in conifer forest is relatively open, with numerous downed trees. Most trees are young to intermediate in age. The abundance of downed trees, coupled with the relatively young age of standing trees, provides evidence of the previous logging of the USFS lands in the early 1980s.

Table 4. VEGETATION COVER TYPES AND ASSOCIATED SPECIES⁶

Common Name	Scientific Name	Aspen	Conifer	Mixed Aspen/Conifer	Sagebrush
Grasses/Sedges					
Elk sedge	<i>Carex geeyeri</i>		X		
Kentucky bluegrass	<i>Poa pratensis</i>			X	
Pinegrass	<i>Calamagrostis rubescens</i>	X	X		
Prairie junegrass	<i>Koeleria cristata</i>				X
Timothy	<i>Phleum pretense</i>	X			
Forbs					
Bastard toadflax	<i>Comandra umbellata</i>				X
Black-headed coneflower	<i>Rudbeckia occidentalis</i>			X	
Capitate sandwort	<i>Arenaria congesta</i>				X
Meadow rue	<i>Thalictrum occidentale</i>	X			
Mule's ear	<i>Wyethia amplexicaulis</i>				X
Nettle-leaf horsemint	<i>Agastache urticifolia</i>	X			
One-sided wintergreen	<i>Pyrola secunda</i>		X		
Silvery lupine	<i>Lupinus argenteus</i> Var. <i>parviflorus</i>			X	
Sticky geranium	<i>Geranium viscosissimum</i>	X			
Wild strawberry	<i>Fragaria virginiana</i>			X	
Trees/Shrubs					
Aspen	<i>Populus tremuloides</i>	X		X	
Cascade mountainash	<i>Sorbus scopulina</i>		X		
Douglas fir	<i>Pseudotsuga menzeizii</i>		X	X	
Lodgepole pine	<i>Pinus contorta</i>		X	X	
Mountain big sagebrush	<i>Artemisia tridentata</i> ssp. <i>Vaseyana</i>			X	
Mountain lover	<i>Pachistema myrsinites</i>		X		
Mountain snowberry	<i>Symphoricarpos oreophilus</i>	X		X	X
Oregon grape	<i>Mahonia repens</i>				X
Scouler's willow	<i>Salix scouleriana</i>			X	
Serviceberry	<i>Amelanchier alnifolia</i>		X		
Silver sagebrush	<i>Artemisia cana</i>				X
Sub-alpine fir	<i>Abies lasiocarpa</i>		X	X	

⁶ Maxim Technologies, Inc. 2001. Baseline Data Collection Vegetation and Wildlife Resources. North Rasmussen Ridge Mine, Caribou County, Idaho. Prepared for Agrium-CPO, August 2001, Helena, Montana.

The sagebrush/grassland community occurs mainly on gently west- and south-facing slopes on dry soils or rocky outcrops. Common species include mountain big sagebrush, silver sagebrush, mountain snowberry, Oregon grape, and several forbs and grasses.

The Aspen forest type is found throughout the study area, primarily on mesic sites. Aspen forests are interspersed with sagebrush/grassland at lower elevations and with conifer forest at higher elevations. The majority of aspen are young, which is typical of forests in early successional stages. Aspen forests include a diverse understory of shrubs, forbs, and grasses.

Caribou County, like most counties in southeast Idaho, is also facing a growing problem with noxious and invasive plant species. This problem is a result of past wild fires in the county and is a major contributor to the continued fire cycle on fire-disturbed land within the county.

The county also has extensive areas in the Farm Service Agency's Conservation Reserve Program (CRP). The program encourages farmers to convert highly erodible cropland or other environmentally sensitive acreage to vegetative cover, such as tame or native grasses, wildlife plantings, trees, filterstrips, or riparian buffers. Farmers receive an annual rental payment for the term of the multi-year contract. Cost sharing is provided to establish the vegetative cover practices. Approximately 6.6% of Caribou County cropland has been placed in the CRP for protection erosion reduction and upland game bird nesting habitat. Generally CRP land is limited to no more than 25% of cropland within a county unless special exception to the limit is granted.

Geology

Caribou County is part of the Basin and Range Province. The Basin and Range Province overlaps the Idaho-Wyoming thrust belt in the area from Montpelier to Pocatello. It extends northeast to Jackson Hole, west across southern Idaho to the Albion Range and north across the Snake River Plain to east-central Idaho east of Mackay.

Basins were filled with unconsolidated deposits formed by faulting or erosion or both. Thick sequences of unconsolidated deposits that have variable permeability are common in these basins. In some basins, these deposits might be as much as 5,500 feet thick. Basins in areas where the bedrock consists of volcanic, igneous, and metamorphic rocks typically contain extremely permeable aquifers that consist of coarse sand, gravel, and cobbles that were eroded from the parent rocks. The deposits typically are coarser grained near the margins of the basins and finer grained near the center of the basins.⁷

Soda Springs is located near the Paris thrust fault, which separates the older, Late Proterozoic and Lower Paleozoic rocks of the Bear River Range from the younger Paleozoic rocks of the Preuss Range north and east of town. These younger rocks, belonging to the Meade thrust plate, contain the Permian Phosphoria Formation which is so important to the economy of the Soda Springs area.

⁷ http://capp.water.usgs.gov/gwa/ch_h/H-text2.html

Soils

The dominant soils are Xerolls and Borolls⁸. They have a frigid or cryic temperature regime, depending largely on elevation. Deep, silty Argixerolls (Bancroft series) and Haploxerolls (Rexburg series) are major soils on the loess-covered plains. Deep, silty Cryoborolls (Tetonia and Lanark series) are on foothills. Moderately deep, gravelly, medium textured Cryoborolls (Driggs series) are on alluvial fans and terraces near the mountains. Shallow, skeletal, medium textured Rendolls (Sheege series) are on south-facing slopes of the mountains. Moderately deep, medium textured Cryoborolls (Pavohroo series) are on north-facing slopes.

Soils on mountain sideslopes are dominantly cryepts, ustepts, udepts and xerepts. Stony Cryorthents and areas of rock outcrop are on ridges and peaks above timberline. Ustalfs and cryalfs are on some mountain footslopes and plateaus. Most soils are skeletal and are medium to moderately coarse textured.

Wildlife

Caribou County has over 80 different species of mammals occupying the County's wide variety of habitats. The Idaho Department of Fish and Game manages wildlife populations and the USDA - Forest Service, Bureau of Land Management, U.S. Army Corps of Engineers, and Idaho Department of Lands are responsible for wildlife habitats on lands they manage.

Several mammalian species are known or expected to occur within the county. These species include several members of the rodent family; various bats; intermediately sized species such as coyotes (*Canis latrans*); badgers (*Taxidea taxus*); bobcats (*Lynx rufus*); and mountain cottontails (*Sylvilagus nuttalli*); and large mammals including, black bear (*Ursus americanus*), and mountain lion (*Felis concolor*). The majority of the carnivores found in the area feed on small mammals and birds and use most of the habitat types in the area. Other mammals documented within the county include beaver (*Castor Canadensis*), porcupine (*Erethizon dorsatum*), snowshoe hare (*Lepus americanus*), northern pocket gopher (*Thomomys armatus*), yellow pine chipmunk (*Eutamias amoenus*), and least chipmunk (*Eutamias minimus*).

The county is an important area for big game, mule deer (*Odocoileus hemionus*), Rocky Mountain elk (*Cervus elaphus*), moose (*Alces alces*), because of the diverse, interspersed habitat types, availability of water, gentle topography, and limited access. Elk and mule deer are the two most common large mammals that occur within the county⁵. All three species can be found within and around the area during spring, summer, and fall. Elk prefer sagebrush-grass and mountain brush habitats during winter, sagebrush-grass and aspen habitats in spring, aspen habitats in summer, and conifer habitats during fall. Mule deer prefer mountain brush and riparian vegetation during winter; mountain brush, riparian, aspen, and aspen/conifer habitats during spring and summer; and aspen and conifer during the fall. The county contains critical winter habitat for both deer and elk.

⁸ http://www.id.nrcs.usda.gov/technical/soils/common_res_areas.html

Table 5. Migratory Birds Observed In Study Area

Common Name/Species	Habitat	Common Name/Species	Habitat
American kestrel <i>Falco sparverius</i>	Sagebrush, riparian	Mallard <i>Anas platyhynchos</i>	Wetland
American robin <i>Turdus migratorius</i>	Riparian, conifer, mixed aspen/conifer	Mountain bluebird <i>Sialia currucoides</i>	Sagebrush, mixed aspen/conifer
Black-billed magpie <i>Pica pica</i>	Riparian, sagebrush, conifer	Mountain chickadee <i>Parus gambeli</i>	Mixed aspen/conifer, conifer, aspen
Brewer's blackbird <i>Euphagus cyanocephalus</i>	Sagebrush, riparian	Mourning dove <i>Zenaida macroura</i>	Sagebrush
Brown-headed cowbird <i>Molothrus ater</i>	Sagebrush, mixed aspen/conifer, wetland	Northern flicker <i>Colaptes auratus</i>	Mixed aspen/conifer, conifer, aspen, riparian
Cassin's finch <i>Carpodacus cassinii</i>	Mixed aspen/conifer, conifer	Northern goshawk <i>Accipiter gentiles</i>	Mixed aspen/conifer, aspen, riparian
Chipping sparrow <i>Spizella passerine</i>	Mixed aspen/conifer	Pine siskin <i>Carduelis pinus</i>	Mixed aspen/conifer, Conifer
Cinnamon teal <i>Anas cyanoptera</i>	Wetland	Red crossbill <i>Loxia curvirostra</i>	Mixed aspen/conifer, Conifer
Common nighthawk <i>Chordeiles minor</i>	Sagebrush	Red-breasted nuthatch <i>Sitta Canadensis</i>	Sagebrush
Common raven <i>Corvus corax</i>	Mixed aspen/conifer, conifer	Red-naped sapsucker <i>Sphyrapicus nuchalis</i>	Aspen, mixed aspen/conifer, riparian
Common snipe <i>Gallinago gallinago</i>	Wetland	Red-tailed hawk <i>Buteo jamaicensis</i>	Riparian, sagebrush, mixed aspen/conifer, aspen
Dark-eyed junco <i>Junco hyemalis</i>	Mixed aspen/conifer	Sandhill crane <i>Grus Canadensis</i>	Wetland, riparian
Downy woodpecker <i>Picoides pubescens</i>	Riparian, mixed aspen/conifer, aspen, conifer	Song sparrow <i>Melospiza melodia</i>	Riparian, wetland
Flammulated owl <i>Otus flammeolus</i>	Conifer, mixed aspen/conifer, aspen	Townsend's solitaire <i>Myadestes townsendi</i>	Mixed aspen/conifer
Franklin's gull <i>Larus pipixcan</i>	Wetland	Turkey vulture <i>Cathartes aura</i>	Sagebrush, mixed aspen/conifer
Gray jay <i>Perisoreus Canadensis</i>	Conifer, mixed aspen/conifer	Vesper sparrow <i>Poocetes gramineus</i>	Sagebrush
Great-horned owl <i>Bubo virginianus</i>	Mixed aspen/conifer, conifer, aspen, riparian	Western tanager <i>Piranga ludoviciana</i>	Mixed aspen/conifer, conifer, aspen, riparian
Green-tailed towhee <i>Pipilo chlororus</i>	Mountain brush	Western wood-pewee <i>Contopus sordidulus</i>	Riparian, aspen, conifer, mixed aspen/conifer
Hairy woodpecker <i>Picoides villosus</i>	Mixed aspen/conifer, conifer, riparian	White-breasted nuthatch <i>Sitta carolinensis</i>	Mixed aspen/conifer, conifer, aspen
House wren <i>Troglodytes aedon</i>	Riparian, mixed aspen/conifer, aspen	Williamson's sapsucker <i>Sphyrapicus thyroideus</i>	Mixed aspen/conifer, conifer, aspen
Lincoln's sparrow <i>Melospiza lincolnii</i>	Riparian	Yellow warbler <i>Dendroica petechia</i>	Riparian
MacGillivray's warbler <i>Oporornis tolmiei</i>	Riparian, mixed aspen/conifer	Yellow-rumped warbler <i>Dendroica coronata</i>	Mixed aspen/conifer, aspen, riparian

Moose prefer aspen and conifer types during the winter, summer, and fall, and aspen in spring. Moose can also be found throughout the county at any time of the year. Moose in the area do not concentrate in specific wintering areas, but are widely dispersed in aspen and conifer communities year-round⁵. They tend to stay within a small home range and are well adapted for foraging in deep snow.

Special status raptor species found in the county include: northern goshawk (*Accipiter gentiles*), boreal owl (*Aegolius funereus*), flammulated owl (*Otus flammeolus*), and great gray owl (*Strix nebulosa*). Other raptors found in the county include American kestrel (*Falco sparverius*), flammulated owl, great-horned owl (*Bubo virginianus*), northern goshawk, and red-tailed hawk (*Buteo jamaicensis*). Other raptors, such as golden eagle (*Aquila chrysaetos*), Cooper's hawk (*Accipiter cooperii*), and sharp-shinned hawk (*Accipiter striatus*) may nest in the aspen or conifer stands or forage within the various vegetation types throughout the county. Northern harriers (*Circus cyaneus*) typically nest in grassland habitat (to the west in Enoch Valley) and may also be found in the county.

Canada geese (*Branta canadensis*), curlews (*Numenius spp.*), and other waterfowl nest in the county. Shorebirds such as sandpipers (*Calidris spp.*), avocets (*Recurvirostra spp.*), and willets (*Catoptrophorus semipalmatus*) can also be found. A summary of migratory birds observed in the county and their associated habitat types is provided in Table 5.

Upland birds present in Caribou County include: blue grouse (*Dendragapus obscurus*), spruce grouse (*Falcapennis canadensis*), sharp-tailed grouse (*Tympanuchus phasianellus columbianus*), chukar partridge (*Alectoris chukar*), gray partridge (*Perdix perdix*), California quail (*Callipepla californica*), mountain quail (*Oreortyx pictus*), ring-necked pheasant (*Phasianus colchicus*).

Archeological and Historic Sites

Soda Springs is the hub of the Bear Lake Caribou Scenic Byway and the Pioneer Historical Byway in southeast Idaho⁹. This area was on the routes of the earliest explorers, fur trappers and Oregon Trail emigrants. Thousands of emigrants passed through the present site of Soda Springs, named for the many effervescent natural springs in the area. For travelers of the mid 1800s, the soda springs that bubbled through the calciferous soil of the area were a welcome rest stop along the Oregon Trail.

Caribou County is rich in the history of the Oregon Trail¹⁰. Wagon ruts are visible to this day from many areas throughout the county. There are historical sites all over the county and preservation of these sites is important to the residents of the county. Sites within the county that have earned the recognition of being placed on the National Register of Historic Places include:

- Chesterfield Historic District, Town of Chesterfield
- Caribou County Courthouse, Soda Springs
- Enders Hotel, Soda Springs

⁹ <http://www.sodaspringsid.com/>

¹⁰ May, 2001. 2001 Comprehensive Plan for Caribou County, Idaho.

- Hopkins William House, Soda Springs
- Lander Cutoff to the Oregon Trail
- Largilliere House, Soda Springs
- Soda Springs City Hall

Other areas of significant value to residents include:

- Niter Ice Cave
- Black Canyon Gorge – Grace City Park
- Last Chance Canal
- Sheep Rock – Oregon Trail
- Hooper Springs
- Formation Springs Preserve
- China Hat Volcano
- Chester's Store in Henry
- Grays Lake national Wildlife Refuge
- Tincup
- Lava rock formations
- Oregon Train Crater
- Daughter's of Utah Pioneers Museum
- Presbyterian Church – Soda Springs
- Historic Gravesites

Hydrology

Caribou County has several major drainages and water bodies within its boundaries¹¹. The Blackfoot River and tributaries total 346 miles covering 734 surface acres. Blackfoot Reservoir covers 19,000 surface acres and contains 50,000 acre-feet of water at capacity. The Blackfoot River is the reservoir's major tributary and has a mean annual flow of 168 cubic feet per second (cfs). The river upstream from the reservoir extends 35 miles to its origin at the confluence of Lane and Diamond creeks.

The Portneuf River and tributaries total 297 miles of stream, and drain nearly 1,300 square miles. In addition, there are four irrigation storage reservoirs in the drainage covering 1,705 acres.

The Bear River and its major tributary streams comprise 524 river miles. There are a number of irrigation storage reservoirs in the drainage.

Caribou County is in State Water District 11. Water District 11 is composed of the entire Bear River Drainage in Idaho, excluding those tributary streams which are set up as separate water districts. The district is located in the Bear Lake, Franklin, Caribou and Bannock Counties.

¹¹ <http://imnh.isu.edu/digitalatlas/counties/counties.htm>

The Bancroft-Lund Ground Water Management Area is located in southeastern Idaho in Caribou County. The area was declared a GWMA on October 21, 1991. The basis for the declaration was the interrelationship between ground water and spring flow into the Bear River at Black Canyon¹² and concern that proposed ground water development would deplete spring flows. There were also public concerns of well interference problems.

Ground water flow in the Bancroft-Lund area are unconfined except where saturated porous basalts are encountered beneath clay layers of lake bed deposits. A ground water divide occurs near the center of the area. Ground water north of the divide flows toward the Portneuf River to the northwest; ground water south of the divide flows south into the Bear River drainage. Springs in Black Canyon on the Bear River discharge as much as 22 cfs. The most productive wells in the area are completed in basalts while wells completed in the lakebed sediments are poorer producers.

Recharge occurs from precipitation on the valley floor and surface runoff from the surrounding mountains. Ground water flow through Ten Mile Pass and through the gap at Soda Point also provides recharge. Further recharge occurs from irrigation canals and infiltration from excess irrigation. There is limited natural surface flow across the valley floor. Hydrographs for the area indicate a generally stable ground water table with fluctuations attributed mainly to climatic wet and dry cycles. No overall downward trends are apparent.

Transportation and Commuting

There are two major roadways turning through the county; U.S. Route 30 and State Route 34. Route 30 enters the county southeast of Soda Springs and then heads directly west out of Soda Springs to meet with Interstate 15. State Route 34 cuts across the northeast part of the county, heads directly south to Soda Springs where it merges with U.S. Route 30, branches off of U.S. 30 west of Soda Springs and heads south into Franklin County.

Two scenic byways have been designated in Caribou County including the Pioneer Historic Byway and the Oregon Trail/Bear Lake Scenic Byway. The Pioneer Byway runs along Highways 30 and 34. The Oregon Trail/Bear Lake Scenic Byway runs along old Highway 30 from the county-line with Bear Lake County into Soda Springs.

The county has jurisdiction over all roads outside of the incorporated cities of the county, with the exception of state and federal highways. The county roads are considered in good to fair condition. In 2000 the county was responsible for the maintenance of 209.9 miles of oiled roads, 166.6 miles of graveled roads and 344.84 miles of gravel and unimproved roads only maintained only in the summer months. Total miles of roads maintained are 719.99.

¹² Harrington, Helen and Shane Bendixsen. December 1999. GROUND WATER MANAGEMENT AREAS IN IDAHO: OVERVIEW AS OF 1998. Idaho Department of Water Resources, Boise, Idaho

The Union Pacific railroad has a rail line traversing the southern portion of the County in a general east-west direction between Soda Springs and Bancroft, and continuing west into Bannock County. However, there is no rail passenger service within the county.

The Forest Service and BLM have built and maintained numerous gravel roads throughout the county for recreation, logging, ranching and mining. Some of these have been closed and some are currently gated with access allowed for seasonal use or during a wildfire. Additionally, there are numerous miles of dirt roads and trails that are not maintained by federal, state, private or county entities. These roads provide access to many of the remote areas of the county but are generally only known to local residents and recreationist.

Aviation Facilities

Soda Springs and Bancroft have small public airports. Grace has a private airport. None offer any scheduled, commercial service.

Emergency Services

Law enforcement is provided by the Caribou County Sheriff Department throughout the county. Law enforcement is also provided within and by the municipality of Soda Springs. Ambulance services are located in Soda Springs, Grace and Bancroft. The county is served by four volunteer fire departments:

- Caribou County VFD, staffed by 18 volunteers
- City of Soda Springs VFD, staffed by 17 volunteers
- Grace VFD, staffed by 13 volunteers
- Bancroft VFD, staffed by 12 volunteers.

Federal and State agencies are the major landowners and provide wildfire protection for much of Caribou County. The major landowner wildfire protection is combined with protection areas provided by Volunteer Fire Departments. Wildfire response-protection districts in Caribou County are provided on Map 2 of the Appendix A.

Caribou has two formal fire protection districts: Bailey Creek (district contracts with the county for fire protection) and Freedom (does not contract with Caribou County for fire protection, but does contract with Thayne, Wyoming). There is also an unwritten agreement between Caribou County and Bonneville County for Caribou County to provide fire protection in the Wayan loop and the west side of Gray's lake along the boundary between the two counties. The U.S. Forest Service, IDL and BLM provide wildfire protection in much of Caribou County.

Wildfire Hazard Components

Caribou County has been the site of numerous wildfires over the past thirty years, although none have been large in size compared to other fires in southern Idaho. The fuels, weather and topography in Caribou County combine to make wildfire an annual hazard with associated risks. Because of the fuel types, access problems and rough terrain, the fires in Caribou County are very difficult to manage. The most recent large fires to impact Caribou County and its residents occurred in 2003. Fires occurring in the past few years were:

- 1994 - Tin Cup (100 acres, lightning caused)
- 1994 - Browns Canyon (2,000 acres, lightning caused)
- 2000 - Gentle Valley (1,253 acres, lightning caused)
- 2000 - Enoch Valley (69 acres, lightening caused)
- 2000 - Rocky Knoll (280 acres)¹³
- 2001 - Ninety-Percent (41 acres, human caused)
- 2003 - Trail Canyon (733 acres, human caused unintentional)

Traditionally lightening causes 51% of the fires within Eastern Idaho and 49% are human caused¹⁴. Additionally, there were numerous small fires started by farm equipment working in the fields. These fires were numerous in number, but small in size due to the inability of the farmed fields to carry a fire and because the farmers would extinguish the fires as quickly as they would start. Map 3 in Appendix A shows the fire starts, by cause, for 2003.

With the inclusion of previously farmed fields into the CRP program there has been fewer fires started by farm equipment. However, there is a growing concern the potential for larger, more catastrophic fires has increased. This is due to the increased fuel load on CRP lands and the absence of farmers in the field to stop fires before they become large.

Map 4 in Appendix A depicts those areas that have burned over the past three decades. From the map it is clear that fires tend to cluster in the same areas, especially in the central and western portion of the county. Landscape scars from past intense large wildfires are obvious in much of the County. The vegetative recovery from many of these wildfires is ongoing and many of the burned areas have been converted to Cheatgrass and other invasive plant species.

Fires in the northern portion of the County traditionally burn in a southwest to northeast pattern in accordance with the prevailing wind patterns. Wind rose information for Pocatello, Idaho, indicates that the prevailing wind direction is from the southwest. In the some portions of the County there is no prevailing burn pattern as the valleys cause unpredictable wind vortex.

¹³ This fire was actually in Franklin County but posed a risk to Caribou County.

¹⁴ <http://www.fs.fed.us/r4/caribou-targhee/EIIFC/Data/Data/Statistics.htm>

2001 Soda Springs Wildfire Risk Assessment

In 2001, the BLM contracted with Dynamac Corporation to conduct a wildfire risk assessment of the Soda Springs community¹⁵. The area included in the assessment can be found in Appendix A, Map 5. The assessment rated sample points for fuel type, density, fuel bed depth, slope, aspect and elevation. It also conducted a structural assessment that included: structure density, proximity to structures, building materials, survivable space, roads, response time and access. The results of this assessment are considered representative of the lower elevations within the county and will be included and referenced in this plan as appropriate.

Idaho State University Wildland Fire Model

The Bureau of Land Management's (BLM) Upper Snake River District (USRD) Geographic Information Systems (GIS) team and the GIS Training and Research Center (GISTReC) at Idaho State University (ISU), have created a model to predict potential wildfire risk areas for Caribou County, Idaho¹⁶. During this project models were created of specific individual risks associated with wildfires: topography, vegetation moisture, fuel load, and the number of structures at risk. The Bureau of Land Management funded this modeling effort. The results of this modeling effort will be included and referenced in this plan as appropriate.

Caribou County Wildland/Urban Interface Assessment

In 2004 Caribou County Emergency Services in cooperation with the Caribou County GIS department conducted a wildland/urban interface assessment of the homes with Caribou County¹⁷. The assessment is based on known conditions which contribute to or mitigate WUI situations. Six components were used to evaluate each home: Access, Topography, Vegetation, Construction, Resources, and Hazards. Each component is based on factors which affect fire management in the wildland/urban interface. The assessment is not a fire model such as developed by Idaho State University, but assesses the level of risk to lives and homes based on individual site conditions. The results of this assessment will be included and referenced in this plan as appropriate.

Wildfire Fuels in Caribou County

Fuels that contribute to wildfires in Caribou County range from sagebrush/grass to Pinion-Juniper, lodgepole pine evident at higher elevations or on north aspects. Sagebrush with a grass under story (including lands in CRP) is the major wildfire fuel near communities, homes or developments.

¹⁵ Wildland-Urban Interface Communities-At-Risk Program, Final Hazard Assessment Report. 2001. Dynamac Corporation BLM Contract No.: 1422-N660-C98-3003.

¹⁶ Bulawa, Walt, Francisco M. Garcia Gomez and Richard Neves. 2004. Wildland/Urban Interface and Communities at Risk: Joint Fire Modeling Project for Caribou County, Idaho. Bureau of Land Management, Upper Snake River District GIS And Idaho State University GIS Training and Research Center. pp 37.

¹⁷ Allen, Josse, and Dennis Godfrey. 2004. Caribou County Wildland Urban Interface Assessment. Caribou County GIS Department. pp 14.

On BLM lands and State Land, fire exclusion and lack of mechanical treatment (thinning) have resulted in dense stands of sagebrush. Where fire has been present, the native grass and shrub species have been replaced with Cheatgrass or other invasive non-native species. These sagebrush, grass and weed areas provide available fuel for wildfire spread and increased intensity. Drought, combined with these vegetation types, provides additional dead vegetation to fuel future wildfires.

Farmland that has been placed in the Conservation Reserve Program (CRP) has shown significant increases in wildfire fuel loads. Because of restrictions on vegetation manipulation activities on CRP land fuel material has been allowed to accumulate for several years on these sites. The limitation of vegetation manipulation has also resulted in an invasion of non-native species on some CRP land.

The 2001 Dynamac Corporation assessment¹⁵ rated sample points for fuel type, density and fuel bed depth. Each element was assigned a class type according to the definitions in Table 6. Map 5 in Appendix A also shows a composite of the survey results for fuel types from most severe (class C rating for all three elements) to least severe (class A rating for all three elements). The results of this assessment are considered representative of the lower elevations within the county.

Map 6 in Appendix A shows the results of the fuel element of the Idaho State University (ISU) model to predict potential wildfire risk areas for Caribou County, Idaho.

Caribou County Weather

The wildfire season in Caribou County is June through September. The highest fire danger usually occurs in July and August. It is common to have numerous consecutive days of “Very High” to “Extreme” fire danger from July through September. Thunderstorms ignite most of the wildfires during the high fire danger periods, and can often start over 20 wildfires from one storm. Nationwide, in 2002, the firefighting community went to its highest level of preparedness and readiness five weeks earlier than ever before. It remained at that level for a record-setting 62 days.¹⁸

Fire Weather Watches and Red Flag Warnings, are issued for conditions of high to extreme fire danger (as determined by land management agencies) and dry fuels, in combination with one of the following: “dry” thunderstorm activity, lightning after an extremely dry period, strong winds and low relative humidity, or in the judgment of the forecaster, weather conditions will create a critical fire control situation. In 2003, the Pocatello Fire Weather Office issued a total of 57 (32 in 2002, 42 in 2001 and 111 in 2000) Red Flag Warnings¹⁹. Red Flag Warnings were in effect on a total of 13 days (8 in 2002, 14 in 2001 and 32 in 2000). Of the 57 warnings issued, 30 were issued for “dry” lightning and these occurred in July and August. The remainder of the warnings were issued for winds, low relative humidity and high Haines Index.

¹⁸ <http://www.nifc.gov/fireinfo/2002/summary.html>

¹⁹ Fire Weather Annual Report, Southeast Idaho, 2003. Pocatello Fire Weather Office, Pocatello, Idaho

Table 6. Dynamac Corporation Fuel Rating Percents and Definitions

Rating Element	Class A		Class B		Class C	
	% of Sample Points	Definition	% of Sample Points	Definition	% of Sample Points	Definition
Fuel Type	28	Small, light fuels (grass, weeds, shrubs)	48	Medium Fuels (brush, medium shrubs, small trees)	24	Heavy Fuels (timber, woodland, large brush or heavy planting of ornamentals)
Fuel Density	3	Non-continuous fuel bed. Grass and/or sparse fuels adjacent to federal land « than 30% cover).	14	Broken moderate fuels adjacent to federal land (31 to 60% cover)	83	Continuous fuel bed. Composition conducive to crown fires or high intensity surface fires (> 60% cover)
Fuel Bed Depth	11	Low (average less than 1 foot)	55	Moderate (average 1-3 feet)	35	High (average greater than 3 feet)

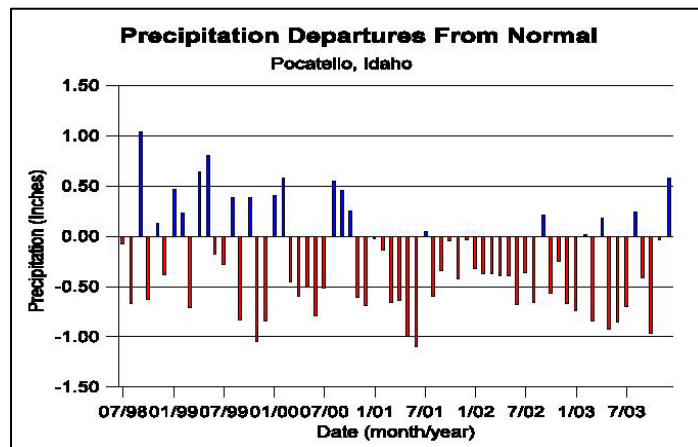
Table 7. Dynamac Corporation Topography Rating Percents and Definitions

Rating Element	Class A		Class B		Class C	
	% of Sample Points	Definition	% of Sample Points	Definition	% of Sample Points	Definition
Slope	35	Flat to little slope (<10%)	21	Moderate slopes (10-30%)	45	Steep slopes (>30%)
Aspect	21	North (N, NW, NE)	24	East or level	55	South and West (SE, S, SW, W)

Drought

Recent concerns about the effects of climate change, particularly drought, are contributing to concerns about wildfire vulnerability. The term drought is applied to a period in which an unusual scarcity of rain causes a serious hydrological imbalance. Unusually dry winters, or significantly less rainfall than normal, can lead to relatively drier conditions, and leave reservoirs and water tables lower. Drought leads to problems with irrigation, and may contribute to additional fires, or additional difficulties in fighting fires. However, most fuel types (not including grasses) require two or three years of drought before the fuel becomes dangerously dry.

When climate records for Idaho are viewed statewide over roughly the past century it is evident that the current drought situation rivals the severe drought period of the mid 30s however, paleoclimatic studies based on tree ring data in Idaho and western Montana suggest that in the past several hundred years that there have been periods of drought more severe than in the last century.¹⁹



Caribou County Topography

The varied topography of Caribou County, mountainous terrain, U shaped valleys, river drainages, level dry croplands will contribute to wildfire hazards (see Map 7 in Appendix A). The mountain ranges within the county run generally north-south. The vegetation types on these mountain ranges have historically been the source of numerous lightning caused wildfire. The topographical influence to the mountainous terrain and steep river drainages will increase wildfire rates of spread and intensity. Fire suppression in the mountainous areas or river drainages is difficult, long response times and access to the wildfires yields increased hazard to fire fighters and allows wildfires to grow in size.

Transportation corridors, roads, interstate highways, and railroads yield human caused wildfires that are often in the more rugged terrain of Caribou County. Human caused wildfires within Caribou County have historically occurred during times of High to Extreme fire danger, with the combination of high fire danger and rugged terrain with long travel distance and limited road access, the topographic influence on these fires will be the catalyst for larger and more hazardous wildfires.

The 2001 Dynamac Corporation wildfire risk assessment¹⁵ of the Soda Springs community rated sample points for slope and aspect. Each element was assigned a class type according to the definitions in Table 7. Map 8 in Appendix A also shows a

composite of the survey results for fuel types from most severe (class C rating for all three elements) to least severe (class A rating for all three elements). The results of this assessment are considered representative of the lower elevations within the county.

Map 9 in Appendix A shows the results of the topography element of the Idaho State University (ISU) model to predict potential wildfire risk areas for Caribou County, Idaho.

Other Hazard Issues

The interface areas within Caribou County are characterized by a diverse mixture of varying housing structures, development patterns, ornamental and natural vegetation and natural fuels. In the event of a wildfire, vegetation, structures and other flammables can merge with unpredictable results. Reviewing past WUI fires shows that most property is destroyed or damaged for one or more of the following reasons:

- Combustible roofing material;
- Wood construction;
- Structures with no defensible space;
- Fire departments with poor or limited road access to structures;
- Developments located in heavy natural fuel types;
- Structure/properties located on steep slopes covered with flammable vegetation;
- Limited water supply.

Caribou County exhibits all of these characteristics either throughout the county, or in some instances, within a very concentrated area. During every public meeting about this planning effort several of the issues identified above were echoed by the public.

Limited Road Access is a major issue for all emergency service providers within the County. As population trends and demands for housing increase, some developments exhibit less than adequate turn-around space for emergency vehicles. Some County communities and developments are challenged by steep narrow roadways, while others are served by bridges that have weight restrictions imposed, thereby eliminating various types of fire suppression resources as an option in protecting lives and properties.

The 2001 Dynamac Corporation wildfire risk assessment¹⁵ of the Soda Springs community rated sections for roads and access. Each element was assigned a class type according to the definitions in Table 8. A total of 60 sections were identified as containing structures such as homes or buildings. The results of this assessment are considered representative of the lower elevations within the county. The Caribou County Wildland-Urban Interface Assessment¹⁷ also considered access as part of their rating system.

Response Times for volunteer fire departments is poor in the outlying areas. This is due in part to the location of firefighting equipment and also in part to communication procedures resulting in failures to page the nearest VFD. Currently, much of the County

Table 8. Dynamac Corporation Road and Access Rating Percents and Definitions

Rating Element	Class A		Class B		Class C	
	% of Sections	Definition	% of Sections	Definition	% of Sections	Definition
Roads	23	Wide loop roads that are maintained, paved or solid surface with shoulders.	70	Roads are maintained. Some narrow two lane roads with no shoulders.	7	Narrow and or single lane, minimally maintained, no shoulders.
Access	32	Multiple entrances and exits that are well equipped for fire trucks with turnarounds.	58	Limited access routes. Two ways in and two ways out. Moderate grades.	10	Narrow, dead end roads or 1-way in, 1-way out. Steep grades.
Response Time	100	Prompt response time to interface areas (20 minutes or less)	0	Moderate response time to interface areas (20-40 minutes)	0	Lengthy response time to interface areas (40+ minutes)

is not covered by any fire protection district. The diversity, location and amount of fire fighting equipment, as well as the number of personnel within each of the VFDs are substantially different between the major communities and developments.

The 2001 Dynamac Corporation wildfire risk assessment¹⁵ of the Soda Springs community rated sections for response time. The element was assigned a class type according to the definitions in Table 8. Based on interviews with Mr. Daren Schwartz, the Caribou County Fire Chief, the entire assessment area rated as a class A (response times of <20 minutes).

Limited Water Supply in remote developments and communities within the County continue to hamper suppression operations in the interface. Wildland areas continue to rely on the natural water sources within the county, but those areas that are co-mingled with private ownership face characteristically inadequate water systems and lack of hydrants. In the Pioneer subdivision within the boundaries of Soda Springs, specific concerns were expressed about the ability of the fire hydrants to be able to supply adequate water volume to multiple pumpers should there be a large fire in the area. Additionally, concern was expressed about emergency power supply to critical water sources as power supply tends to be easily disrupted when wildfires occur.

Home location and condition within the County was raised at each of the public meetings. Caribou has a good inventory regarding the location of homes within the County (see Map 10 in Appendix A). Structure location was one of the elements used in the ISU wildland fire model.

Bear River RC&D Fire Department Assessment for Caribou County

During 2003, the Bear River Resources Conservation and Development (RC&D) organization surveyed the fire departments in eastern Idaho for fire department needs and weaknesses. Caribou County includes four fire districts/departments within its boundaries: Bancroft Fire Department, Caribou County Fire District, Soda Springs Fire Department and Grace Fire Department. A copy of the RC&D report²⁰ accompanies this plan and is incorporated by reference. The results of that survey indicate the following needs within the fire suppression organizations within Caribou County:

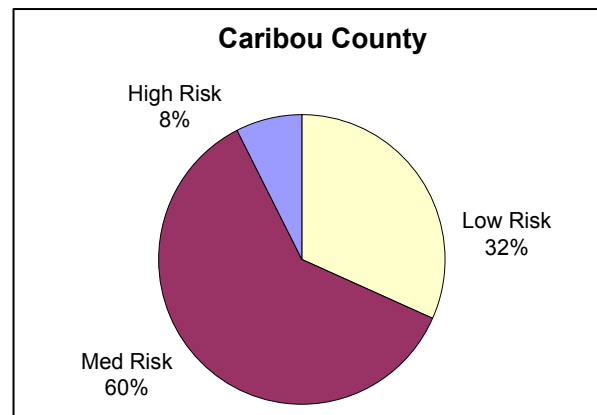
Firefighter Program Identified Needs	
Fire Stations <ul style="list-style-type: none"> • New Station = 1 • Bays = 1 • Improved Access to Bays = 1 • Classroom/Training Space = 1 • Office Space = 1 • Meeting Space = 1 Road Maintenance/Improvement/Access/Code Issues = 1 Testing Equipment	Grant Related Needs <ul style="list-style-type: none"> • Grant Funding = 4 • Grant Writer = 1 • Assistant with Grant Process = 3 • Grant Resource Library Specific to EMS/Fire = 2 • Grant Writing Course = 3 Improved Records Management System = 1 Computerization <ul style="list-style-type: none"> • Desk Top Computer = 4

²⁰ Bear River Resource, Conservation & Development Area. June 2003. Composite Report, Caribou County Fire Departments & Districts. pp. 5

<ul style="list-style-type: none"> • Current NFPA Testing Manuals & Workbooks = 3 • Testing Equipment = 3 Water System Additions/Improvements <ul style="list-style-type: none"> • Underground Water Storage Tanks = 1 • Wells = 1 • Pumps = 1 • Upgrade Water System = 2 • Agreements with Farmers to Use Agricultural Pumps = 1 	<ul style="list-style-type: none"> • Computer/Software Training = 1 Light Brush Truck = 2
Training and Certifications Identified Needs	
Wildlands Response Training = 3 Training Aids: Videos, Slides, Table Top Simulators = 2 Established Training Program = 1	Inhouse Instructors = 1 IFSTA Training Manuals & Workbooks = 2 Computer-based Training = 1
Communications Identified Needs	
Hand-held Radios = 3	New Base Station Radio = 1
Prevention and Inspection Identified Needs	
Fire Code Enforcement Training = 1 Fire Cause & Origin Investigations Training = 2	County Adoption of Fire Codes = 1 Fire Inspector = 1
Public Education Identified Needs	
Pre-packaged Presentation/Instructional Materials = 1	Handout Materials = 2

Hazard Location

Based on the model created by the GIS Training and Research Center (GISTReC) at Idaho State University (ISU), the majority of the area within Caribou County is classified as a moderate risk for wildfires. The areas within Caribou County that are at highest hazard from wildfire, as identified by the ISU modeling effort, can be found in Map 11 in Appendix A.



Caribou County Wildland/Urban Interface (WUI)

Caribou County contains numerous developments that are in two of the three defined WUI categories. These categories are:

Classic Interface: An area where well-defined urban and suburban development press up against open expanses of wildland areas.

Mixed Interface: Isolated homes, subdivisions, and small communities situated predominantly in wildland settings

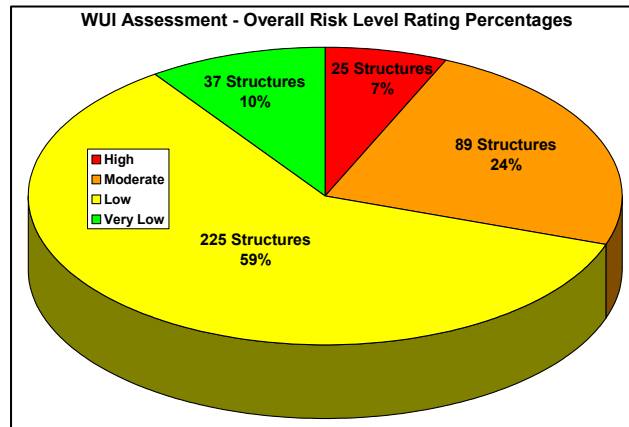
Occluded Interface: Characterized by islands of wildland vegetation occurring inside largely urbanized areas.

While a hazard assessment has been conducted by Dynamac Corp., and a formal Wildland/Urban Interface assessment has been conducted by Caribou County. Most of

Caribou County is in the mixed interface category, with the communities of Soda Springs, Grace and Bancroft fitting the classic interface definition. In the mixed interface definition are the areas of Bailey Creek, Caribou Village, Dike, Great Columbia, Lame Duck, Lundgren, Neibaur Mountain, Pebble Creek, Trail Canyon, Wood Canyon, Cedar and Valley View¹⁷.

Map 10 in Appendix A depicts home density. Generally, those areas that have known past urban-interface problems are represented in yellow and red on Map 10. They are areas where structures and values can and have been threatened by wildfires and are of special concern to fire personnel and homeowners.

Based on the Caribou County Wildland Urban Interface Assessment¹⁷, 22% of all the residences in Caribou County (1,300 homes outside of incorporated areas) are located in Wildland/Urban Interface. Adding Bear Lake County's portion increases this figure to about 28% (376 homes). Of the 376 homes considered in the Wildland/Urban Interface 31% of are at a moderate to high risk level.



Values at Risk

Values at risk to wildfire in Caribou County includes privately owned homes and property, County assets (buildings, communication sites, road/highway stabilization or repair), soil stability concerns, critical wildlife winter ranges, recreational activities and tourism, and the safety of residents, visitors, and fire fighters in the fuel types, conditions and rugged terrain of Caribou County. The county currently has over 2,912 homes and other property valued at more than \$242 million.

In addition to the homes at risk to wildfire, there are 225,000 acres of farmland in Caribou County (not including land in the CRP) valued at more than \$59.4 million. These figures do not include the millions of dollars in livestock and other personal assets that are at risk to wildfire. Mining industry assets in the county are also at risk and include the Monsanto Phosphate processing facility just north of Soda Springs. These assets are valued in the multi-millions of dollars and are significant to the tax base of Caribou County.

Three highway transportation corridors, U.S. Highway 30 and State Highway 34 are vulnerable to wildfire. Bureau of Land Management and U.S. Forest Service roads have been closed on numerous occasions because of wildfires. Wood power poles and power lines are at risk in a wild land fire situation. Not only does a fire have the potential to ignite wood poles, there is the possibility of Carbon pathing and power interruption. Power outages on transmission lines can have a catastrophic effect on people in the whole

Western United States. In 1997, wildfires in Eastern Idaho knocked out power to multiple states and millions of customers.

Hazard Prioritization

Based on the hazards discussion, the planning team constructed six different hazard themes that they believed fully encompassed the hazard discussions. The planning team then prioritized the hazard themes by rating each theme as having a High, Medium or Low impact on the three plan goals for 1) Protection of life, 2) Protection of property, and 3) Protection of resources. The following list shows the results of the rating process, with the themes sorted in priority order from most important to least important.

- Caribou County citizens have had limited firewise education, information and awareness with regards to wildfire.
- Caribou County lacks defensible space and fire resistant building materials in some developments and at private homes in the Wildland/Urban Interface.
- Caribou County contains limited sources of water for fighting wildfires and many of those sources are vulnerable to disruption of service in the event of a wildfire.
- Caribou County contains numerous roads and access restrictions (including weight limits on bridges) that may limit or exclude access to, and suppression of wildfires.
- Caribou County contains numerous county roads, infrastructure, communication sites, developments, wildlands and communities that require hazardous fuels reduction.
- Caribou County volunteer fire departments need continued and ongoing infrastructure support in the areas of training, personal protective equipment (PPE), communications, equipment, apparatus and facilities to remain safe, effective and timely in suppression activities.

Mitigation Goals and Strategy

Hazard prioritization and mitigation goals are in accordance with the stated objectives and priorities, specifically: Protection of Life, Property and Values at Risk. The mitigation goals were developed in response to the issues identified by the Caribou County Wildfire Mitigation Group and input from the public meetings. The list of mitigation goals responds directly to the hazards faced and the issues raised by the residents of Caribou County.

HAZARD 1: Caribou County citizens have had limited firewise education, information and awareness with regards to wildfire.

Mitigation Goal: Increase the opportunities and availability for the citizens of Caribou County to increase their knowledge and application of firewise activities and techniques to reduce the risk and impact of wildfires.

HAZARD 2: Caribou County lacks defensible space and fire resistant building materials in some developments and at private homes in the Wildland/Urban Interface.

Mitigation Goal: Complete and integrate planning activities and develop and implement ordinances appropriate for the county to reduce damage to life, property and values within Caribou County due to wildland fire.

HAZARD 3: Caribou County contains limited sources of water for fighting wildfires and many of those sources are vulnerable to disruption of service in the event of a wildfire.

Mitigation Goal: Provide additional sources of water at strategic locations throughout Caribou County and means of supplementing or replacing service in the event of disruption.

HAZARD 4: Caribou County contains numerous roads and access restrictions (including weight limits on bridges) that may limit or exclude access to, and suppression of wildfires.

Mitigation Goal: Improve existing access where feasible and plan new roads and access routes with wildfire suppression needs in mind.

HAZARD 5: Caribou County contains numerous county roads, infrastructure, communication sites, developments, wildlands and communities that require hazardous fuels reduction.

Mitigation Goal: Reduce identified hazardous fuels buildup in high-risk areas.

HAZARD 6: Caribou County volunteer fire departments need continued and ongoing infrastructure support in the areas of training, personal protective equipment (PPE), communications, equipment, apparatus and facilities to remain safe, effective and timely in suppression activities.

Mitigation Goal: Provide Caribou County VFDs with required training, communications, Personal Protective Equipment (PPE), Apparatus, Facility improvements and equipment to maintain or improve wildland fire fighting preparedness, capability and response times.

Actions to Achieve Mitigation Goals

The wildfire mitigation actions provide direction on specific activities that organizations and residents in Caribou County can undertake to reduce risk and prevent loss from wildfire events by achieving a mitigation goal.

Goal 1: Increase the opportunities and availability for the citizens of Caribou County to increase their knowledge and application of firewise activities and techniques to reduce the risk and impact of wildfires.

There is an ongoing need to provide public education regarding wildfire issues in Eastern Idaho. These activities are the responsibility of the federal, state and local fire service agencies, and are important in the prevention of wildfires, and in the mitigations of hazards and risks to communities. These activities are most effective when done cooperatively between fire service agencies since the issues affect all of the fire service cooperators. In Eastern Idaho, approximately 50% of all wildland fires are caused by people. This is an issue that greatly affects the severity of the annual fire season and is one that can be mitigated by reducing these numbers.

Action 1.1	Educate the public on what is in county/community mutual aid agreements, including when they can legally respond and what a responder can and can't do when they respond.
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Objective: Reduced pressure on Volunteer Fire Departments to respond to incidents where they have no authority.

Location: County-wide with special emphasis on the VFD jurisdictions of Soda Springs, Grace and Bancroft

Lead: Caribou County Emergency Services

Cooperators: Bancroft VFD, Grace VFD, Soda Springs VFD, Bureau of Land Management, U.S. Forest Service

Priority: Medium

Cost: \$1,000 - Preparation time
\$500 - Initial publication costs

Comments: Publish a "Welcome to Fire Country" type pamphlet to distribute with building permit applications and residential sales agreements (see action 1.12).

Action 1.2	Ensure that all parties operating under the mutual aid agreements understand the agreements and are knowledgeable about the policies and capabilities of their own department and those departments with whom they have agreements.
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Objective: Reduced pressure on Volunteer Fire Departments to respond to incidents where they have no authority.

Location: County-wide with special emphasis on the VFD jurisdictions of Soda Springs, Grace and Bancroft

Lead: Caribou County Emergency Services

Cooperators: Bancroft VFD, Grace VFD, Soda Springs VFD, Bureau of Land Management, U.S. Forest Service
 Priority: High - #4
 Cost: \$0
 Comments: Best accomplished through annual half- or full-day workshops with the affected agencies or organizations to review and discuss the contents of the agreements. Workshops should include all members of the local VFDs.

Action 1.3	The fire service agencies will work with homeowner's associations to review restrictive covenant requirements to bring these covenants in line with enabling homeowners to implement defensible space guidelines.
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Objective: Relaxing of restrictive homeowners covenants that may prohibit implementation of defensible space activities.
 Location: Pioneer, Bailey Creek, Dike, Cedar and Valley View subdivisions
 Lead: Caribou County Emergency Services
 Cooperators: Home Owners Associations, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, Fort Hall Fire Department, Local Volunteer Organizations
 Priority: High - #8
 Cost: \$0
 Comments: Urge residents to take responsibility in reducing the risk of wildfire and to create defensible space around their residence.

Action 1.4	Host fire agency booths at regular county events (e.g. Caribou Safety Days, Caribou County Fair) and implement events specific to fire prevention (i.e., Caribou Fire Prevention Day) to encourage education and cooperation.
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Objective: Increase awareness and knowledge of county residents on the causes of wildland fires and measures they can take to reduce the hazards.
 Location: County-wide
 Lead: Caribou County Emergency Services
 Cooperators: Bancroft VFD, Grace VFD, Soda Springs VFD, Bureau of Land Management, U.S. Forest Service
 Priority: Medium
 Cost: \$2,000 - Handout material
 Comments: The fire service agencies will continue to emphasize fire prevention and defensible space concepts during public and community events and provide detailed educational material to homeowners regarding how to create defensible space around their homes.

Action 1.5	The county will conduct annual FIREWISE community cleanup days and provide incentives for communities such as free dump days at the county landfill for fuel reduction debris or providing a chipper to dispose of debris.
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Objective: Reduction of fuels hazards and improved defensible space around homes.

Location: County-wide with emphasis on the communities of Grace, Bancroft, Soda Springs and the subdivisions of Pioneer, Bailey Creek, Dike, Cedar and Valley View

Lead: Caribou County Emergency Services

Cooperators: Home Owners Associations, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, Fort Hall Fire Department, Local Volunteer Organizations

Priority: High - #1

Cost: \$5000 per cleanup day

Comments: The county will identify key people in the communities who are willing to take an active grass roots role in promoting FIREWISE communities. The fire service agencies will support these individuals by providing expertise, materials, funding, labor etc.

Action 1.6	The county will identify homes and make contacts with homeowners who are interested in fuels reduction to volunteer their property to be used as a defensible space demonstration project to educate other adjacent homeowners.
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Objective: Showcase homes that demonstrate the wildfire and aesthetic benefits from fuels reduction.

Location: Pioneer, Bailey Creek, Dike, Cedar and Valley View subdivisions

Lead: Caribou County Emergency Services

Cooperators: Home Owners Associations, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, Fort Hall Fire Department, Local Volunteer Organizations

Priority: High - #7

Cost: \$3,000 per demo project

Comments: Involve local civic, service, youth organizations and homeowners to clear a defensible space around selected demonstration homes.

Action 1.7	Promote implementation of the FIREWISE Community program in selected areas of the County.
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Objective: Demonstrate the benefits from being part of a firewise community.

Location: Pioneer, Bailey Creek, Dike, Cedar and Valley View subdivisions

Lead: Home Owners Associations

Cooperators: Caribou County Emergency Services, Caribou County Volunteer Fire Departments

Priority: High - #2

Cost: \$250 - Coordinator training
\$500 - Coordinator Travel
\$500 - Local Workshop Costs

Comments: The county will identify key people in the communities who are willing to take an active grass roots role in promoting FIREWISE communities (<http://www.firewise.org/communities/>).

The fire service agencies will support these individuals by providing expertise, materials, funding, labor etc.

Pursue funding assistance through sources such as FIREWISE or National Fire Plan Communities At Risk program, and others to provide prevention and mitigation upgrades to properties at risk.

Solicit input from insurance industry to partner in such projects.

Action 1.8	The fire service agencies will attempt to develop partnerships with other businesses and civic groups such as insurance companies, landscaping companies, nurseries, other government agencies (i.e. Fish and Game, NRCS), sporting goods dealers, farm implement dealers, scouting groups, utility companies, building supply and home improvement vendors etc. to aid the fire agencies in targeting fire prevention issues to fire causes related to their customers.
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Objective: Increase awareness and knowledge of county residents on the causes of wildland fires and measures they can take to reduce the hazards.

Location: County-wide

Lead: Caribou County Emergency Services

Cooperators: Caribou County Volunteer Fire Departments

Priority: Medium

Cost: \$4,000 per year - Educational materials

Action 1.9	Federal agencies will involve the public in pre- and post-treatment field trips of fuels reduction projects, highlighting the need for treatments, fire ecology and post treatment monitoring.
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Objective: Increase awareness of the natural role of fire in rangeland ecosystems and the benefits of prescribed burning or occasionally managing natural wildfire to achieve ecological benefits.

Location: Soda Hills, Petticoat and Fish areas within Caribou County

Lead: Bureau of Land Management

Cooperators: Caribou County Emergency Services, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, Fort Hall Fire Department, Local Volunteer Organizations

Priority: Medium

Cost: \$0 - Part of normal agency operating expenses

Action 1.10	Schedule annual educational events at schools and communities prior to and during fire season.
-------------	--

Objective: Increase awareness and knowledge of county residents on the causes of wildland fires and measures they can take to reduce the hazards.

Location: Local elementary and middle schools

Lead: Caribou County Volunteer Fire Departments

Cooperators: Caribou County Emergency Services, Home Owners Associations, U.S. Forest Service, Idaho Department of Lands , Bureau of Land Management, Fort Hall Fire Department

Priority: Medium

Cost: \$2,000 - Handout materials and other incidental costs

Comments: Invite insurance company representatives to speak at the LEPC and public meetings to promote prevention and mitigation efforts.

Current emphasis on testing and other structural curricula problems make it difficult to build fire education into public school programs. Fire prevention personnel need to work closely with the schools to help insert these programs into the normal education program.

Action 1.11	Purchase, install and maintain Smokey Bear Signs (high, moderate, low fire conditions) in wildland urban interface neighborhoods.
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Objective: Smokey Bear signs help inform the public about the fire danger in the wildland urban interface zone. More of them placed in strategic places would help keep everyone informed.

Location: Pioneer, Bailey Creek, Dike, Cedar and Valley View subdivisions, and major routs out of the communities of Grace, Bancroft and Soda Springs

Lead: Caribou County Emergency Services

Cooperators: Home Owners Associations, Volunteers

Priority: Medium, As requested by neighborhoods

Cost: \$50 - Materials per sign
\$0 - Labor

Comments: Materials will be purchased by the appropriate agency. Eagle Scout candidates build the signs as a community service project. The signs are then given to fire departments for free.

Action 1.12	Work with insurance companies, Realtors and building contractors to publish a “Welcome to Fire Country” type pamphlet to distribute with building permit applications and residential sales agreements.
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Objective: Many migrants to Caribou County are unaware of the potential hazards of living in the wildland urban interface zone. These materials would alert them to these hazards and assist them in finding appropriate locations for their homes.

Location: County-wide

Lead: Caribou County Emergency Services

Cooperators: U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments

Priority: Medium

Cost: \$2,000 - Printed materials

Comments: Include in the pamphlet what is in county/community mutual aid agreements, including when they can legally respond and what a responder can and can't do when they respond (see action 1.2).

Action 1.13	Develop an interactive internet site with a wildland urban interface fire theme for questions, comments, sign-up for home evaluations, volunteer opportunities, and targeted information for recreational home owners.
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Objective: Given the extent of the use of the internet, the creation of a wildland urban interface home page would make it possible for the public to have quick access to appropriate information.

Location: County-wide

Lead: Caribou County Information Technology Department

Cooperators: Caribou County Emergency Services, Caribou County GIS department, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments

Priority: Medium

Cost: \$1,000 - Site development
\$1,000 - Annual site maintenance and updates

Comments: Map data, Final Wildland Fire Mitigation Plan, and mitigation actions status reports should all be included on the web site.

Action 1.14	Conduct annual door-to-door homeowner education programs on wildfire hazards and mitigation focused primarily on homeowners in the Pioneer, Bailey Creek, Dike, Cedar and Valley View subdivisions.
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Objective: Increase awareness and knowledge of county residents on the causes of wildland fires and measures they can take to reduce the hazards.

Location: Pioneer, Bailey Creek, Dike, Cedar and Valley View subdivisions

Lead: Caribou County Emergency Services

Cooperators: Home Owners Associations, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, Fort Hall Fire Department, Local Volunteer Organizations

Priority: Medium

Cost: \$500 - Material costs
\$0 - Volunteer time

Comments: Could involve the local civic, service, youth organizations and County or Federal fire crews.

Goal 2: Complete and integrate planning activities and develop and implement ordinances appropriate for the county to reduce damage to life, property and values within Caribou County due to wildland fire

Action 2.1	Develop and enforce, in cooperation with rural fire chiefs and the IDL to better coordinate on timing and location of allowable debris burning, a County-wide burn permit system in conjunction with a restrictive burning season. Consider a central clearing house for issuance of all burning permits in Caribou County.
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Objective: Protection of people and structures by reducing wildfire ignition through debris burning where resources or conditions are not adequate to support burning.

Location: County-wide

Lead: Caribou County Emergency Services

Cooperators: Caribou County Legal Council, Bancroft VFD, Grace VFD, Soda Springs VFD, Bureau of Land Management, US Forest Service and the Shoshone-Bannock Tribes

Priority: Medium

Cost: \$1,500 - Design and print permits
\$500 - Annually to administer and issues permits

Comments: Burning shall be conducted during daylight hours, unless otherwise specified.

Fire must be attended at all times and put out prior to leaving. This means cold to the touch.

Attendant must have a hose connected to a working water supply or a shovel available at all times.

Fire officials are authorized to require burning to be immediately discontinued if smoke emissions are offensive to occupants or surrounding property.

Action 2.2	Ensure that mutual aid agreements are in place between governments and/or agencies and agreements have been updated and renewed as necessary.
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Objective: Improve response time during wildfire events. Provide clear guidelines and limits of authority for Volunteer Fire Departments, and clarify responsibilities.

Location: County-wide with special emphasis on the VFD jurisdictions of Soda Springs, Grace and Bancroft

Lead: Caribou County Emergency Services

Cooperators: Caribou County Legal Council, Bancroft VFD, Grace VFD, Soda Springs VFD, Bureau of Land Management, US Forest Service, Franklin County, Bear Lake County, Lava Rural Fire District, and the Shoshone-Bannock Tribes

Priority: High - #5

Cost: Cost of this issue would have to be driven by man-hours in development of agreements

Comments: Caribou County and the federal agencies within Caribou County already have a continuous mutual aid agreement and annually reviewed their operations plan. Caribou County also has in place written mutual aid agreements with the three incorporated cities within the County.

In the past, Caribou County and the surrounding jurisdictions have had verbal wildfire aid agreements. Formal written agreements signed by elected officials and fire chiefs will clearly define the process for activating aid and define what type of equipment, man power, and length of time requested equipment and man power can be available. Formal agreements will also clarify indemnities for each jurisdiction.

Action 2.3	Sign a mutual aid agreement between BLM and the Grace VFD.
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Objective: Improve response time during wildfire events. Provide clear guidelines and limits of authority for Volunteer Fire Departments, and clarify responsibilities.

Location: Grace VFD jurisdiction and surrounding public lands

Lead: Bureau of Land Management

Cooperators: Grace Volunteer Fire Department, Caribou County Legal Council, Caribou County Emergency Services

Priority: High - #21

Cost: Cost of this issue would have to be driven by man-hours in development of agreements

Action 2.4	Formalize mutual aid agreements between Caribou County and Franklin, Bear Lake and Bonneville counties.
-------------------	--

Objective: Improve response time during wildfire events. Provide clear guidelines and limits of authority for Volunteer Fire Departments, and clarify responsibilities.

Location: County-wide

Lead: Caribou County Emergency Services

Cooperators: Caribou County Legal Council, Bureau of Land Management, US Forest Service, Franklin County, Bonneville County, Bear Lake County, Lava Rural Fire District, and the Shoshone-Bannock Tribes

Priority: High - #18

Cost: Cost of this issue would have to be driven by man-hours in development of agreements

Comments: Wayan loop in Bonneville county.

Action 2.5	Improve the paging of multiple agencies, through use of a central dispatch, to ensure deployment of closest forces in the event of a wildland fire.
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Objective: Faster response to wildland fire events through assignment of closest forces.

Location: County-wide

Lead: Caribou County Emergency Services

Cooperators: Caribou County Legal Council, Bancroft VFD, Grace VFD, Soda Springs VFD, Bureau of Land Management, US Forest Service, Caribou County Sheriffs Office and the Shoshone Bannock Tribes

Priority: High - #10

Cost: \$2,500 – Planning costs
Implementation cost can not be determined at this time until a more detailed plan for the paging system is developed

Action 2.6	Dissolve the Bancroft VFD and make it a county station #2.
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Objective: Better coordination, equipment and financial support for the VFD and protection for the residents serviced by the current Bancroft VFD.

Location: Bancroft area

Lead: Caribou County Emergency Services

Cooperators: Caribou County Legal Council, Bancroft VFD, Bureau of Land Management, US Forest Service and the Shoshone-Bannock Tribes

Priority: Low

Cost: Can not be determined at this time

Action 2.7	The County will work with planning and zoning to enact, as appropriate, building and development standards and codes for fire protection for residential development in the Wildland/Urban Interface for subdivisions as identified in <i>NFPA 1144, Standard for Protection of Life and Property from Wildfire, 2002 edition</i> and the <i>NFPA 1141, Standard for Fire Protection in Planned Groups, 1998 edition</i>.
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Objective: Improve the defensibility of homes and communities and reduce the risk to life and property from wildfire incidents while providing for firefighter safety.

Location: County-wide

Lead: Caribou County Commissioners

Cooperators: Caribou County Emergency Services, Caribou County Legal Council

Priority: High - #3

Cost: \$0 – costs part of normal department operating expenses

Comments: *NFPA 1144, Standard for Protection of Life and Property from Wildfire, 2002 edition*
5.1.2²¹ Roads shall be designed and constructed to allow evacuation simultaneously with emergency response operations.
5.1.3 Roads shall be not less than 6.1 m (20 ft) of unobstructed width with a 4.1 m (13.5 ft) vertical clearance.

²¹ Numbers refer to the specific section in the reference document.

5.1.6 Roads shall have no grade in excess of 10 percent.

5.1.8 Every dead-end fire service access road more than 91.4 m (300 ft) in length shall be provided with a turnaround at the terminus having a minimum radius of 15.2m (50 ft) to the center line. The AHJ shall be authorized to approve, as an alternative, a “hammerhead T” turnaround to provide emergency vehicles with a three-point turnaround ability.

5.2.1 Where any point of a building is greater than 45.7 m (150 ft) from a road, a driveway shall be provided to within 45.7 m (150 ft) of the building.

5.2.2 Where the driveway is greater than 45.7 m (150 ft) in length, it shall be not less than 3.7 m (12 ft) in unobstructed width with 4.1 m (13.5 ft) in vertical clearance.

5.2.4 Required driveways shall have a grade not to exceed 10 percent.

5.3.1 Any bridge on a road or required driveway shall be designed to accommodate the load of the largest apparatus typically used to respond to that location.

5.3.2 The load limit shall be clearly posted at the approaches to the bridge.

5.4.2 The gate opening shall swing inward and shall provide a clear opening no less than 0.61 m (2 ft) wider than the gated road or driveway.

5.4.3 Emergency responders shall have ready access to locking mechanisms on any gate that restricts access.

5.6.1 Roads, fire service access, dwellings, and commercial structures shall be identified by a consistent identification system that provides for sequenced or patterned numbering and no duplicated naming within each jurisdiction.

5.6.1.2 All letters, numbers, and symbols shall be a minimum of 102 mm (4 in.) in height, with a 12.7-mm (1/2-in.) stroke, and shall be reflectorized and contrasting with the background color of the sign.

5.6.1.3 Signs shall be visible from the road and mounted not less than 1.8 m (6 ft) nor more than 1.8 m to 2 m (6 ft to 8 ft) above the surface of the road, unless local conditions or existing standards prescribe otherwise.

5.6.1.4 Street and road name signs and supporting structures shall be of noncombustible materials.

6.3.1 Propane tanks and other combustible liquids storage shall conform to NFPA 30, Flammable and Combustible Liquids Code, NFPA 58, Liquefied Petroleum Gas Code.

7.1.1 At a minimum, every building shall be provided with a water supply meeting the requirements of NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting, for the purpose of fire

fighting.

7.1.2 Private fire service mains and hydrants shall be installed to meet the requirements of NFPA 24, Standard for the Installation of Private Fire Service Mains and Their Appurtenances.

7.1.3 Threads on all fire hydrant outlets shall be American National Fire Hose Connection Screw Threads and shall be equipped with thread adapters where local fire department thread is different.

7.1.4 Fire hydrants shall meet the requirements of AWWA Standards C-502, Dry Barrel Fire Hydrants, or C-503, Wet Barrel Fire Hydrants.

7.1.5 Dry fire hydrants shall meet the requirements of NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting.

8.2.1 The requirements for roof covering assemblies shall be as follows:

- (1) Only roof covering assemblies rated Class A, B, or C shall be used.
- (2) The specific class shall be consistent with the wildland fire risk and hazard severity assessment as determined by the Caribou County Commissioners.

8.2.2 Vents shall be screened with a corrosion-resistant, noncombustible wire mesh with the mesh opening not to exceed nominal 6.3 mm (1/4 in.) in size.

8.2.3 Eaves shall be boxed in with 15.8 mm (5/8 in.) nominal sheathing or noncombustible materials.

8.3 Overhanging Projections. Porches, decks, balconies, and similar overhanging projections shall be constructed of heavy timber, as defined by local building standards, a 1-hour fire resistive-rated assembly, or noncombustible materials.

8.4 Overhanging Buildings. The underside of overhanging buildings shall be constructed of heavy timber, as defined by local building standards, 2-hour fire-resistive-rated material, or noncombustible materials.

8.5 Exterior Vertical Walls. Exterior vertical walls shall be constructed of heavy timber, as defined by local building standards, or by a 20-minute fire-resistive-rated assembly on exterior walls potentially exposed to a wildland fire unless the wildland fire risk and hazard severity assessment requires greater protection.

8.6.1 Exterior windows and glazed doors, windows within exterior doors, and skylights shall be tempered glass, multilayered glazed panels, glass block, or have a fire-resistance rating of no less than 20 minutes.

8.6.2 Exterior doors shall be approved noncombustible construction, solid core wood no less than 44.5 mm (1.75 in.) thick, or have a fire protection rating of no less than 20 minutes.

8.6.3 Attic and Sub-Floor Ventilation. Vents shall be screened with a corrosion-resistant, noncombustible wire mesh with the mesh opening not to exceed nominal 6.35 mm (1/4 in.) in size.

8.7.1 Outlet Screen. Every fireplace and wood stove chimney and flue shall be provided with an approved spark arrestor constructed of a minimum 12-gauge welded wire or woven wire mesh, with the openings not to exceed 12.7 mm (1/2 in.).

8.7.2 Clearance. Vegetation shall not be allowed within 3.048m (10 ft) of a chimney outlet.

8.8 Accessory Structure(s). Outbuildings, patio covers, gazebos, and other accessory structures shall be constructed to meet the requirements of this chapter or shall be separated from the main structure by a minimum of 9.14 m (30 ft).

8.9.1 Permanently located mobile and manufactured homes installed with a space beneath shall have a skirt installed and maintained of noncombustible materials or a 20-minute fire resistive- rated assembly.

9.1.1 Before the infrastructure is installed, and prior to the location and construction of building or portion thereof, fire protection plans shall be submitted to and approved by the authority having jurisdiction.

9.1.3 Prior to building, occupancy-required permanent water supply for fire protection, including fire hydrants and fire suppression systems, shall be operable.

NFPA 1141, Standard for Fire Protection in Planned Groups, 1998 edition

4-1.1 Means of access for fire department apparatus shall consist of roadways, fire lanes, parking lot lanes, or a combination thereof, and shall be provided to all structures.

4-1.2 Access to the property of the planned building group shall be provided by a minimum of two distinctly separate routes of ingress and egress, each located as remotely from the other as possible.

4-2.1 Roadways shall be constructed of a hard, all-weather surface designed to support adequately the heaviest piece of fire apparatus likely to be operated on the roadway.

4-2.2 Every dead-end roadway more than 300 ft (92 m) in length shall be provided at the closed end with a turnaround having not less than a 120-ft (37-m) outside diameter of traveled way.

4-2.3 Roadways shall have a minimum clearance of 12 ft (3.7 m) for each lane of travel, excluding shoulders and parking. Provisions shall be made for factors that could impinge on the minimum width, for example,

drainage, snow removal, parking, and utilities.

4-2.5 Grades shall be not less than 0.5 percent in order to prevent pooling of water in a traveled way.

4-2.6 Landscaping or other obstructions placed around structures shall be maintained in a manner that does not impair or impede accessibility for fire department operations.

4-2.7 Any secondary road intersecting with another road shall be sloped 1 to 3 percent down and away from the intersection for a distance of 100 ft (30 m) from the intersection.

4-2.9 Turns in roadways shall maintain the minimum road width.

4-2.10 Turns in publicly owned or privately owned major feed roadways shall be constructed with a minimum radius of 100 ft (30 m) to the centerline.

5-1.1 At least one approved means of access shall be provided to each structure or other nonstructural fire hazard within the planned building group. For structures or other nonstructural fire hazards exceeding two stories or 30 ft (9.2 m) in height above average adjacent ground level, not less than two approved separate means of access shall be provided.

5-1.2 Structures exceeding 1000 ft² (102.5 m²) gross floor area shall be required to be within 50 ft (15.4 m) of an approved means of access.

Exception No. 1: Structures shall be within 200 ft (60 m) of an approved means of access where the structure is less than 30 ft (9.2 m) in height and protected by an automatic sprinkler system installed in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems; NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes; or NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height.

Exception No. 2: Where any combination of private fire protection systems, including but not limited to fire-resistive roofs, fire separation walls, space separation, and automatic fire-extinguishing systems, is provided and approved by the authority having jurisdiction as an acceptable alternative, waivers to the provisions of 5-1.2 shall be permitted.

5-1.3 Structures exceeding two stories or 30 ft (9.2 m) in height above average adjacent ground level shall have at least 25 percent of one side not more than 30 ft (9.2 m) from an approved means of access. At least 25 percent of one other side shall be not more than 50 ft (15.4 m) from an approved means of access. Both of these sides shall have a means of entry into the structure adjacent to the means of access.

5-2 Structure Separation. If two structures are part of the same planned

building group and either of them exceeds two stories or 30 ft (9.2 m) in height above average adjacent ground level, they shall be separated from each other by at least 50 ft (15.4 m) and shall be at least 25 ft (7.6 m) from a property line. All other structures shall be separated by at least 20 ft (6.1 m) from another structure and shall be at least 10 ft (3.0 m) from a property line.

6-1.2 Any residential building containing more than two residential living units shall have an automatic sprinkler system installed in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems, or NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height, whichever is appropriate.

7-1.1 Water supply systems not publicly owned and installed shall meet the minimum requirements of NFPA 24, Standard for the Installation of Private Fire Service Mains and Their Appurtenances, where no recognized water supply distribution exists.

7-1.2 Private fire service mains and hydrants shall be installed to meet the requirements of NFPA 24, Standard for the Installation of Private Fire Service Mains and Their Appurtenances.

7-1.3 Where other fire-fighting water supply systems are established by the authority having jurisdiction, they shall not be less than the requirements of NFPA 1231, Standard on Water Supplies for Suburban and Rural Fire Fighting.

7-1.4 Fire hydrants shall be marked in a uniform manner, as designated by the Caribou County Commissioners.

7-1.5 Fire hydrants located in parking areas shall be protected by barriers that will prevent physical damage from vehicles without obstructing hydrant operation.

7-1.6 Fire hydrants shall be located within 3 ft (0.9 m) of the curb line of the means of access unless the authority having jurisdiction determines another location is more acceptable for fire department use.

7-1.7 Threads on fire hydrant outlets shall be American National Fire Hose Connection Screw Threads and shall be equipped with thread adapters where local fire department thread is different.

8-2.1 Vents. Vents shall be screened with a corrosion-resistant, noncombustible wire mesh not more than 1/4 in. (0.64 cm) nominal in size.

8-2.2 Overhanging Projections. Porches, decks, patios, balconies, and similar undersides of overhangs shall be constructed of heavy timber, as defined by local building codes, 1-hour fire-resistive material, or noncombustible construction.

8-2.3 Overhanging Buildings. The underside of overhanging buildings

shall be constructed with material of heavy timber, as defined by local building codes, 1-hour fire-resistive material, or noncombustible construction.

8-2.4 Exterior Vertical Walls. Exterior vertical wall coverings shall be constructed of at least 1/2-in. (1.3-cm) nominal sheathing or equivalent material.

8-3 Common Walls. Common walls between dwelling or commercial units shall be constructed to provide a fire resistance rating of not less than 1 hour.

8-4 Vehicle Storage. Vehicle storage areas shall be separated from living areas by walls and ceilings constructed to provide a fire resistance rating of not less than 1 hour.

8-5.1 Only listed fire-retardant roof covering assemblies shall be used.

8-5.2 Roof coverings shall be a Class C listed or better fire retardant roofing assembly.

9-1.2 Fire department vehicular access to all structures under construction shall be provided at all times. In areas where ground surfaces are soft or likely to become soft, hard all-weather surface access roads shall be provided.

9-1.4 Flammable or combustible liquids shall be stored, handled, or used on the construction site in accordance with the applicable provisions of NFPA 30, Flammable and Combustible Liquids Code; NFPA 58, Liquefied Petroleum Gases Code; and NFPA 395, Standard for the Storage of Flammable and Combustible Liquids at Farms and Isolated Sites.

Action 2.8	Provide funding for planning and implementation of mitigations actions identified as part of Phases II and III of the <i>Caribou County Wildland – Urban Interface Assessment – 2004</i> .
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Objective:	The completion of these three levels identifies problem areas and risks. From there mitigation projects can be prioritized and completed. Hazards for which mitigation projects cannot be completed will at least prepare fire personnel and ensure logistical and tactical operations are in place prior to an incident.
Location:	County-wide
Lead:	Caribou County Emergency Services
Cooperators:	U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, City of Soda Springs, Caribou County GIS department
Priority:	Medium
Cost:	Costs can not be determined until completion of the assessment documentation

Action 2.9	Coordinate and cooperate with the City of Soda Springs to conduct a wildland-urban interface assessment utilizing processes detailed in the <i>Caribou County Wildland –Urban Interface Assessment – 2004</i> .
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Objective: Identification of hazards and mitigations measures specific to the Pioneer subdivision.

Location: Pioneer Subdivision

Lead: Caribou County Emergency Services

Cooperators: Soda Springs Fire Department, City of Soda Springs, Pioneer subdivision, Caribou County GIS department

Priority: Medium

Cost: \$1,800 - labor costs (40 hours at \$45 per hour)
\$37 – vehicle costs (100 travel miles at \$0.37 per mile)

Comments: This area is one of the few areas within Caribou County that fits into the classic interface category. Where as this category is perhaps the most dangerous and difficult to mitigate and plan.

Action 2.10	Complete the Master Street Address Guide (MSAG) conducted as part of the county's upcoming Enhanced 911 system.
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Objective: Sequential numbering errors, duplicate road names, and address navigation problems will be fixed ensuring database integrity and better navigation for emergency responders.

Location: County-wide

Lead: Caribou County GIS department

Cooperators: Caribou County Emergency Services

Priority: Medium

Cost: \$0 - No additional funding support needed

Comments: Any error in the system regarding navigational problems or the MSAG is corrected through the Caribou County GIS department.

Action 2.11	Persons owning, controlling, operating or maintaining electrical transmission or distribution lines shall have an approved program in place that identifies poles or towers with equipment and hardware types that have a history of becoming an ignition source, and provide a combustible free space consisting of a clearing of not less than 10 feet (3048 mm) in each direction from the outer circumference of such pole or tower during such periods of time as designated by the code official. Exception: Lines used exclusively as telephone, telegraph, messenger call, alarm transmission or other lines classed as communication circuits by a public utility.
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Objective: Reduction of wildland fires from electrical transmission lines.

Location: County-wide

Lead: Caribou County Emergency Services

Cooperators: Scottish Power Corporation, Idaho Power Corporation
 Priority: Medium
 Cost: \$0 - Cost to be borne by the responsible person
 Comments: The code official is authorized to give notice to the owner of the property on which conditions regulated exist to correct such conditions. If the owner fails to correct such conditions, the government body having jurisdiction is authorized to cause the same to be done and make the expense of such correction a lien on the property where such condition exists.

Action 2.12	Clearances between vegetation and electrical lines shall be in accordance with distances set out below. The radial clearances shown below are minimum clearances that shall be established, at time of trimming, between the vegetation and the energized conductors and associated live parts.										
	<table> <tr> <th data-bbox="418 751 651 787">LINE VOLTAGE</th><th data-bbox="894 751 1382 827">MINIMUM RADIAL CLEARANCE FROM CONDUCTOR (feet)</th></tr> <tr> <td data-bbox="418 827 591 863">2,400-72,000</td><td data-bbox="1084 827 1101 863">4</td></tr> <tr> <td data-bbox="418 863 623 898">72,001-110,000</td><td data-bbox="1084 863 1101 898">6</td></tr> <tr> <td data-bbox="418 898 639 934">110,001-300,000</td><td data-bbox="1084 898 1117 934">10</td></tr> <tr> <td data-bbox="418 934 634 968">300,001 or more</td><td data-bbox="1084 934 1117 968">15</td></tr> </table>	LINE VOLTAGE	MINIMUM RADIAL CLEARANCE FROM CONDUCTOR (feet)	2,400-72,000	4	72,001-110,000	6	110,001-300,000	10	300,001 or more	15
LINE VOLTAGE	MINIMUM RADIAL CLEARANCE FROM CONDUCTOR (feet)										
2,400-72,000	4										
72,001-110,000	6										
110,001-300,000	10										
300,001 or more	15										

Objective: Reduction of wildland fires from electrical transmission lines.
 Location: County-wide
 Lead: Caribou County Emergency Services
 Cooperators: Scottish Power Corporation, Idaho Power Corporation
 Priority: Medium
 Cost: \$0 - Cost to be borne by the Power company or responsible person
 Comments: The code official is authorized to give notice to the owner of the property on which conditions regulated exist to correct such conditions. If the owner fails to correct such conditions, the government body having jurisdiction is authorized to cause the same to be done and make the expense of such correction a lien on the property where such condition exists.

Action 2.13	Adopt and maintain of a multi-agency operational plan for the protection of lives and property during wildland fires. The primary goal of the plan shall be to protect people in the fire area, including emergency personnel responding to the incident, from injury or loss of life. A secondary objective shall be to minimize or eliminate property loss from wildland fire. ²²
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Objective: Reduction in loss of life or property from wildland fire and increased safety for emergency personnel.
 Location: County-wide

²² NFPA 1144, *Standard for Protection of Life and Property from Wildfire*, 2002 edition

Lead: Caribou County Emergency Services
Cooperators: U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, City of Soda Springs
Priority: High - #6
Cost: \$5,000 – Develop and finalize the plan
Comments: The plan shall contain, as a minimum, command, training, community notification and involvement, public safety, and evacuation and mutual assistance elements.

The plan shall contain a command element that clearly defines the responsibilities and authorities of all agencies and organizations that will be used in management of the incident.

Supporting resources such as social service agencies, local media, law enforcement, and so forth shall be included.

Public preparation shall include the following:

- (1) The establishment of a communication system to provide rapid and accurate information to the public regarding wildland fire incidents that endanger their community, including detailed instructions for public notification of impending evacuation
- (2) Information regarding actions to be taken for self protection
- (3) Information regarding appropriate assistance that can be rendered by the public to fire protection agencies in the management of wildland fires
- (4) Security measures to protect evacuated area

A public safety and evacuation element shall provide for the safety of residents and area workers threatened by potential wildland fire.

The public safety and evacuation element shall include the following:

- (1) Incident personnel authority and criteria for ordering evacuations
- (2) Incident personnel responsibilities in evacuations
- (3) Public notification of impending evacuations
- (4) Routes for evacuations
- (5) Shelter locations
- (6) Policy addressing the issue of persons who remain to protect their property and shelter-in-place
- (7) Procedures for allowing evacuees to return when the current fire threat has passed

Goal 3: Provide additional sources of water at strategic locations throughout Caribou County and means of supplementing or replacing service in the event of disruption.

Action 3.1	Continue to locate (using GPS) and document (type of source and reliability) potential water sources available at farms and homes in the County. Including potential water drafting sites. Annually update the information and provide to organizations and agencies conducting fire suppression operations in the County.
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Objective: Identification and documentation of available water sources for fire fighting

Location: County-wide

Lead: Caribou County GIS department

Cooperators: Caribou County Emergency Services, Home Owners Associations, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, Fort Hall Fire Department, Local Volunteer Organizations

Priority: High - #16

Cost: \$800 - Two GPS units with moving map (purchased separately) and computer cable for upload/download (garmin etrex legend type) (@\$400 ea)
\$0 - Volunteer time

Comments: The Caribou County GIS department should establish standards to ensure a high level of interoperability and compatibility between county departments contributing to the inventory and to ensure the creation of a centralized database with a high degree of quality control.

Action 3.2	Locate and place “Dry Hydrants” along strategic creeks and other water sources where domestic water sources are not available (see Map 13 Proposed Water Development Mitigation Locations in Appendix A for priority locations).
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Objective: Improved efficiency for drafting of water for fire fighting.

Location: County-wide

Lead: Caribou County Emergency Services

Cooperators: Home Owners Associations, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, Fort Hall Fire Department, Local Volunteer Organizations

Priority: Medium

Cost: \$100 per unit - number of units to be determined

Comments: Approved draft sites shall be provided at all natural water sources intended for use as fire protection. The design, construction, location, access and access maintenance of draft sites shall be approved by the Caribou County Emergency Services coordinator.

The draft site shall have emergency vehicle access from an access road.
The pumper access point shall be either an emergency vehicle access

area alongside a conforming access road or an approved driveway no longer than 150 feet (45 720 mm). Pumper access points and access driveways shall be designed and constructed in accordance with all codes and ordinances. Pumper access points shall not require the pumper apparatus to obstruct a road or driveway.

Action 3.3	Bury cisterns with stand pipes in low water subdivisions (See Map 13 Proposed Water Development Mitigation Locations in Appendix A for priority water development locations)
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Objective: Provide a dependable water source in high hazard areas where water is currently limited, not dependable, or unimproved.

Location: As identified in Action 3.1, Pioneer, Bailey Creek, Dike, Cedar and Valley View subdivisions

Lead: Caribou County Emergency Services

Cooperators: Caribou County Highway Department, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments

Priority: Medium

Cost: \$7,000 – Material costs (5 units at \$1,400 per unit)
\$12,500 – Labor costs (5 instillations at \$2,500 per instillation)

Comments: In new developments charge developers a fee per lot (e.g. \$1000/lot) to provide for burying cisterns in areas where adequate hydrant water is not available or practicable.

Action 3.4	Water sources, draft sites, hydrants and fire protection equipment and hydrants shall be clearly identified in a manner approved by the code official to identify location and to prevent obstruction by parking and other obstructions.
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Objective: Fast and easy access to water sources during wildland fire events

Location: County-wide

Lead: Caribou County Emergency Services

Cooperators: Caribou County Highway Department, Caribou County Volunteer Fire Departments

Priority: Medium

Cost: \$500 per sign (including instillation)

Action 3.5	Stationary water supply facilities within the urban-wildland interface area dependent on electrical power to meet adequate water supply demands shall provide standby power systems in accordance with the ICC Electrical Code to ensure that an uninterrupted water supply is maintained. The standby power source shall be capable of providing power for a minimum of two hours. ²³
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²³ 2003 INTERNATIONAL URBAN-WILDLAND INTERFACE CODE, Section 404.10.3 Standby power.

Objective: Continued ability to provide water for wildland fire events.
 Location: County-wide as identified in Action 3.1
 Lead: Caribou County Emergency Services
 Cooperators: Scottish Power Corporation, Idaho Power Corporation
 Priority: Medium
 Cost: \$7,500 - Three 15,000 Watt generators at \$2,500 ea.
 Comments: Purchase and strategically locate three (3) mobile emergency power generators to power local water sources in the event of power loss.

Exceptions:

1. When approved by the code official, a standby power supply is not required where the primary power service to the stationary water supply facility is underground.
2. A standby power supply is not required where the stationary water supply facility serves no more than one single-family dwelling.

Action 3.6

Developers of new subdivisions shall provide a water supply for wildland fire fighting.

Objective: Ensure that all new development have adequate and dependable water sources for wildland fire fighting.
 Location: County-wide
 Lead: Caribou County Commissioners
 Cooperators: Caribou County Emergency Services, Caribou County Planning and Zoning
 Priority: High - #17
 Cost: \$0 - Cost to be borne by the developer
 Comments: Water supplies for commercial buildings constructed in the wildland urban area will be determined on an individual case by case basis by the code official.

Subdivisions from 2 to 19 lots – water supplies will be the fire district water supply system. There will be a fee of \$1000.00 per lot assessed on the building permit to allow the fire district to install or improve present water systems. If the code official determines that water supplies need to be on-site within the subdivision the developer will provide approved areas to install the water supplies.

Subdivisions – 20 lots to 59 lots: Water supplies will be in an approved system capable of delivering 500 gallons per minute for a period of sixty minutes. Water supplies for subdivisions 60 lots and over will be in an approved system capable of delivering 500 gallons per minute for a period of 120 minutes. Subdivisions larger than 90 lots will be required to install an approved water system capable of delivering 500 gallons per minute for a period of sixty minutes for every 30 lots.

Subdivisions that are constructed close enough to a municipal water

system and are able to connect to a municipal water system may be under the requirement to provide water supplies in this manner and install an approved system.

When a developer is developing a subdivision that is 2 to 19 lots wants to install an approved water system that meets or exceeds the requirements of a larger subdivision the developer will not be assessed the \$1000.00 per lot on the building permit. i.e. Developer wants to require installation of an approved residential fire sprinkler system or wants to install an approved water system capable of delivering 500 gallons per minute for a period of sixty minutes - the \$1000.00 per lot water supply fee would be waived.

Goal 4: Improve existing access where feasible and plan new roads and access routes with wildfire suppression needs in mind.

Action 4.1	Post evacuation plans at central locations for sub-divisions (e.g. in a locked pipe at the entrance to a subdivision showing all home locations and indicating special need locations).
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- Objective: Provide emergency services and residents with quick and orderly evacuation of areas in the event of a wildland fire emergency.
- Location: Cities of Soda Springs, Grace and Bancroft and the Pioneer, Bailey Creek, Dike, Cedar and Valley View subdivisions
- Lead: Caribou County Emergency Services
- Cooperators: U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, City of Soda Springs, Caribou County Sheriffs Office and the Shoshone-Bannock Tribes, Home Owners Associations, Caribou County GIS department
- Priority: High - #15
- Cost: \$200-1,000 – materials (depending on who is involved and how it is done)
- Comments: WUI assessment data in conjunction with GIS can be used to identify and plan evacuation routes. Each area that has these plans stored will need community support and coordination with local jurisdictions. This includes private, county, city, state, and federal agencies which are likely to be involved with an incident in that area. In some subdivisions there are homeowner associations which could serve as a point of contact to begin.

Action 4.2	As funds permit, install turnouts or turn-arounds on those roads identified on the Caribou County Wildland Urban Interface Assessment of 2004 as having restricted access.
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- Objective: Easier access and maneuverability by emergency response units during an event.
- Location: see Caribou County WUI Assessment report for possible locations
- Lead: Caribou County Highway Department

Cooperators: Caribou County Emergency Services, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, Caribou County GIS department

Priority: High - #19

Cost: To be determined (TBD) based on site-specific engineering and construction requirements.

Action 4.3	Develop alternative escape routes for the Bailey Creek area.
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Objective: Ability of residents of Bailey Creek to exit the subdivision in the event a wildland fire closes the main access road.

Location: Bailey Creek Subdivision

Lead: Caribou County Emergency Services

Cooperators: Home Owners Associations, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Fort Hall Fire Department, Caribou County GIS department

Priority: High - #12

Cost: \$0 - Public meetings
\$2,000 - Public education activities and signs

Comments: Conduct public meetings with homeowner associations, groups and private homeowners to develop community-based evacuation plans and procedures for selected, isolated neighborhoods, communities or developments, specifically starting with the Bailey Creek Area.

Establish a system of identifying designated escape routes from subdivisions and neighborhoods through use of signs or route markers.

Initiate public information campaign, through use of mailers, public service announcements, and public meetings to educate residents about escape routes and evacuation planning.

In the event there is no alternate route out, determine a safety zone to support fire fighters and citizens. For example, Bailey Creek contains a clubhouse with pool and enormous lawn that could be used as such a safety zone.

Action 4.4	In cooperation with Idaho Transportation Department, Caribou County Highway Department, and the Caribou County Sheriff's Department, develop a pre-plan for evacuation management, to include pre-designation of evacuation routes, emergency road closures or restrictions, and traffic flow control.
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Objective: Orderly and safe evacuation of county residents in an emergency.

Location: County-wide

Lead: Caribou County Emergency Services

Cooperators: Idaho Transportation Department, Caribou County Highway Department, Caribou County Sheriff's Department, Home Owners Associations, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Fort Hall Fire Department, Caribou County GIS department

Priority: High - #20

Cost: \$25,000 - Plan development

Goal 5: Reduce identified hazardous fuels buildup in high-risk areas.

Action 5.1	Persons owning, leasing, controlling, operating or maintaining buildings or structures requiring defensible spaces are responsible for modifying or removing non fire-resistive vegetation, and maintaining defensible spaces, on the property owned, leased or controlled by said person.
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Objective: Reduced threat to loss of life or property.

Location: County-wide

Lead: Caribou County Commissioners

Cooperators: Caribou County Emergency Services, Caribou County Planning and Zoning

Priority: High - #23

Cost: \$0 - Costs to be borne by responsible individuals

Comments: Fuel modification shall be provided within a distance from buildings or structures as follows:

- Moderate hazard WUI interface areas, fuel modification areas shall not be less than 30 feet.
- High hazard WUI interface areas, fuel modification areas shall not be less than 50 feet.
- Extreme hazard WUI interface areas, fuel modification areas shall not be less than 100 feet

For all other purposes, the fuel modification distance shall not be less than 10 feet (3048mm) or to the property line, whichever is less. Distances specified above shall be measured along the grade from the perimeter or projection of the building or structure. Distances specified above may be increased by the code official because of a site-specific analysis based on local conditions and the fire protection plan.

Trees are allowed within the defensible space, provided the horizontal distance between crowns of adjacent trees and crowns of trees and structures, overhead electrical facilities or unmodified fuel is not less than 10 feet (3048 mm).

Deadwood and litter shall be regularly removed from trees. Where ornamental vegetative fuels or cultivated ground cover, such as green grass, ivy, succulents or similar plants are used as ground cover, they are allowed to be within the designated defensible space, provided they do not form a means of transmitting fire from the native growth to any

structure.²⁴

Special emphasis should be directed to developing defensible space fire barriers around single and multiple house sites, and farm/business sites surrounded by CRP lands.

Action 5.2	<p>Tree crowns extending to within 10 feet (3048 mm) of any structure shall be pruned to maintain a minimum horizontal clearance of 10 feet (3048 mm). Tree crowns within the defensible space shall be pruned to remove limbs located less than 6 feet (1829mm) above the ground surface adjacent to the trees.</p> <p>Portions of tree crowns that extend within 10 feet (3048mm) of the outlet of a chimney shall be pruned to maintain a minimum horizontal clearance of 10 feet (3048 mm).</p> <p>Deadwood and litter shall be regularly removed from trees.²⁵</p>
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Objective: Reduced threat to loss of life or property.
Location: County-wide
Lead: Caribou County Commissioners
Cooperators: Caribou County Emergency Services, Caribou County Planning and Zoning
Priority: Medium
Cost: \$0 - Costs to be borne by responsible individuals

Action 5.3	<p>Conduct fuel mitigation activities in priority locations identified on Map 12 (Proposed Fuel Mitigation Locations) of Appendix A. Encourage coordination of fuel mitigation activities on private land with planned activities by the Bureau of Land Management and Forest Service to maximize treatment efficiency, benefit and to complement activities on public land.</p>
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Objective: Reduce fuel loads and provide for defensible space around homes.
Location: See Map 12 (Proposed Fuel Mitigation Locations) in Appendix A
Lead: Caribou County Emergency Services
Cooperators: Idaho Transportation Department, Caribou County Highway Department, Caribou County Sheriff's Department, Home Owners Associations, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Fort Hall Fire Department
Priority: High - #9
Cost: Dependent on timing and extent of treatment needed. Homeowners should be encouraged to apply for Stevens Grant Funds for fuel reduction activities adjacent to, and in coordination with, Bureau of Land Management and Forest Service treatment activities.

²⁴ 2003 INTERNATIONAL URBAN-WILDLAND INTERFACE CODE, Section 603.2 Fuel modification.

²⁵ 2003 INTERNATIONAL URBAN-WILDLAND INTERFACE CODE, Section 604.4 Trees.

Comments: Areas on Map 12 of Appendix A were identified because of their moderate to high fuel loads and limited or no defensible space currently around the home site.

Action 5.4	Develop a hazardous fuels reduction plan for perimeters of CRP fields or around buildings to create firebreaks that will reduce the potential threat from a wildfire.
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Objective: Reduce fuel loads and reduce potential for wildland fires to spread to surrounding property.

Location: See Map 12 in Appendix A

Lead: Farm Service Agency (FSA)

Cooperators: Caribou County Volunteer Fire Departments, Caribou County Emergency Services, Idaho Department of Lands, Idaho Department of Fish & Game, Bureau of Land Management, U.S. Forest Service, Fort Hall Fire Department, Natural Resources Conservation Services (NRCS)

Priority: High - #14

Cost: \$2,500 – Plan development

Comments: Work with State and Federal government agencies to develop site-specific guidelines for grazing, mechanical treatment or burning of CRP lands that are keyed to elevation, climatic, or grass disturbance indicators (to replace broad, countywide dates and rules) and that provide for fuel load reductions or fire barrier construction on CRP land while still meeting the intent or objective of the CRP set aside.

Work with State and Federal government agencies to accept and encourage the use grass species that are more fire resistant or produce less dry fuel than common crested wheat grass (e.g. Alfalfa and Greenar wheat grass).

Work with State and Federal government agencies to permit placement of wildfire barriers in very large tracts of CRP to limit total fire size.

Action 5.5	Coordinated management of CRP land with noxious weed and noxious insect control measures.
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Objective: Reduction of noxious weeds and insect invasion from CRP land to surrounding land.

Location: County-wide

Lead: Caribou County Emergency Services

Cooperators: Natural Resources Conservation Services (NRCS), Idaho Department of Lands, Idaho Department of Fish & Game, Bureau of Land Management, U.S. Forest Service, Fort Hall Fire Department, Farm Service Agency (FSA), Caribou County GIS department

Priority: Medium

Cost: \$0 – Costs are part of agency's normal operating expenses

Comments: Utilize noxious weed data maintained by the Caribou County GIS department.

Goal 6: Provide Caribou County VFDs with required training, communications, Personal Protective Equipment (PPE), Apparatus, Facility improvements and equipment to maintain or improve wildland fire fighting preparedness, capability and response times.

Action 6.1	Provide a Fire Station with office and training space for the Bancroft VFD (Station is 4000 sq.ft., office and classroom are 500 sq. ft.).
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Objective: Alleviate current space restrictions and provide shelter for additional equipment identified in the RC&D assessment.

Location: Bancroft area

Lead: Bancroft Volunteer Fire Department

Cooperators: Caribou County Emergency Services

Priority: Medium

Cost: \$56,250 – Equipment bays, office and class room (4500 Sq.Ft. at \$125/sq.ft.)

Comments: Assemble a task group through the County LEPC to study and plan a project.

Task group to conduct a needs assessment to identify building size requirements, possible site placement, cost estimates and locally available resources to construct a new fire station at Rockland.

Task Group works with local District and county officials, State and federal agencies, and possible private sector sources to identify potential partners and funding sources.

Develop a project proposal that will serve as a basis for pursuing grants and other sources of funding to complete the project.

Action 6.2	Acquire current NFPA Testing Manuals & Workbooks.
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Objective: Better prepared VFDs.

Location: County-wide

Lead: Caribou County Emergency Services

Cooperators: Caribou County Volunteer Fire Departments

Priority: Medium

Cost: \$500 - Comprehensive Consensus Codes® Set CD-ROM

Action 6.3	Acquire a 1000 gal. first response truck for the Bancroft Rural Fire Dept.
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Objective: This would decrease the response time and increase the likelihood that wildland fires in the area would be kept at small acreages.

Location: Bancroft area

Lead: Caribou County Commissioners

Cooperators: Bancroft Volunteer Fire Department, Caribou County Emergency Services
 Priority: High - #25
 Cost: \$30,000
 Comments: The Federal Government has out of service engines available at a decreased cost available to rural fire departments. This would make it more economically feasible to purchase and station a 1000 gal. Engine at the Bancroft Station.

Action 6.4	Improve County grant writing success by training an individual to serve as a County Grant Writer and develop a Grant Resource Library Specific to EMS/Fire.
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Objective: Increase in grant success rate and funding sources for wildland fire mitigation actions and improvements.
 Location: County-wide
 Lead: Caribou County Emergency Services
 Cooperators: Caribou County Commissioners, Caribou County Volunteer Fire Departments
 Priority: Medium
 Cost: \$0 - Grant Training and Resource Library: Minimal cost as most resources are available free of charge from the Federal Government
 Comments: see <http://www.nal.usda.gov/ric/ruralres/funding.htm#GWR>.

Action 6.5	Provide wildfire training opportunities (including use of computer-based training) to VFD's and interested citizens. Coordinate with USFS/BLM for wildfire training and utilize the BLM Rural Fire Assistance program.
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Objective: Better prepared VFDs.
 Location: County-wide
 Lead: Caribou County Emergency Services
 Cooperators: Caribou County Commissioners, Caribou County Volunteer Fire Departments, Bureau of Land Management, US Forest Service
 Priority: High - #24
 Cost: \$500 - Wildfire Training CDs
 \$2,200 - Computer projector
 \$500 - Power Point Software
 Comments: Training should include incident command training.

Action 6.6	Computerize the Records Management System of all VFDs in Caribou County. System should use the standard Idaho Fire Incident Reporting System and submit required reports to the State Fire Marshall's Office.
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Objective: Better record keeping of wildland fires and improve and speed updates to this Wildland Fire Mitigation Plan
 Location: County-wide
 Lead: Caribou County Emergency Services

Cooperators: Caribou County Commissioners, Caribou County Volunteer Fire Departments
Priority: Medium
Cost: \$8,400 - Four desktop computer systems with MS Office

Action 6.7	Acquire a commercial grade chipper for use in fuel reduction.
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Objective: By implementing this program residents can take a very proactive approach in reducing the hazardous fuels around their residences. Residents will also have a way to get ride of the large amounts of debris that is created.

Location: Setup the chipper at various subdivisions as cleanup days are scheduled and also have the chipper available at the county shop or other designated location so residents could bring material in on a random basis to further encourage them to continue to clean up their residences throughout the year

Lead: Caribou County Emergency Services

Cooperators: Caribou County Commissioners, Caribou County Volunteer Fire Departments, Bureau of Land Management, U.S. Forest Service

Priority: Medium

Cost: \$10,000

Comments: Right now the county has need of implementing cleanup days as a way of getting citizens that reside in the Wildland Urban Interface to create defensible space around their residences. One problem that comes along with creating defensible space is the large amounts of brush and organic waste that is created. Many residents do not have the equipment to deal with such large amounts of debris.

The chipper could be setup at specific locations to chip the debris. The mulch from these cleanup days could then be given back to the residents to use in their yards. Inmate work crews could be assigned to work with home with the county to run the chipper and help residents unload debris at the chipping sight.

Action 6.8	Acquire a crew cab pickup.
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Objective: Currently the Caribou County Fire Dept. is in need of a 4-door 4x4 pickup to transport fire fighters to and from fires within the county. Currently engines are the only mechanism to transport these personnel and are often inadequate to do so.

Location: The vehicle would be stationed at the Caribou County Fire Station in Soda Springs

Lead: Caribou County Emergency Services

Cooperators: Caribou County Commissioners, Caribou County Volunteer Fire Departments, Bureau of Land Management, U.S. Forest Service

Priority: Medium

Cost: \$38,000²⁶

Action 6.9	Acquire funds to purchase a 3,500 gallon water tender.
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Objective: Currently the Caribou County Rural Fire Dept. has only one water tender. A second water tender is in need. This would give the fire dept. more water that is greatly needed especially in rural areas where fire hydrants are not available. And, mitigate the concern that the fire dept. has about not having enough water in rural areas to extinguish not only structure fires but also wildland urban interface fires.

Location: The water tender would be housed at the Caribou County Fire Station

Lead: Caribou County Emergency Services

Cooperators: Caribou County Commissioners, Caribou County Volunteer Fire Departments, Bureau of Land Management, U.S. Forest Service

Priority: Medium

Cost: \$75,000

Action 6.10	Acquire a heavy engine for wildland fire situations.
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Objective: By purchasing this heavy engine the county will be able to enhance their Wildland Urban Interface suppression capabilities by providing more water and greater pump capacity.

Location: House the heavy engine at the new Caribou County Fire Station in Soda Springs

Lead: Caribou County Emergency Services

Cooperators: Caribou County Commissioners, Caribou County Volunteer Fire Departments, Bureau of Land Management, U.S. Forest Service

Priority: High - #13

Cost: \$160,000

Action 6.11	Improve the communication network in the county by identifying “dead” spots and installing additional radio repeater sites in those areas for emergency communications.
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Objective: Better, more-uniform radio coverage within the county during emergence events.

Location: County-wide

Lead: Caribou County Emergency Services

Cooperators: U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, Fort Hall Fire Department

Priority: High - #22

Cost: \$25,000 to \$35,000 per each site

²⁶ For planning purposes, cost is based on Ford Super-Duty, F-250 King Ranch. No requirement to purchase this vehicle or any Ford product is intended or implied. No endorsement of Ford vehicles is intended or implied.

Action 6.12	Implement a mobile GIS capability within wildland fire response units.
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Objective: Faster and surer response to remote locations.
Location: County-wide
Lead: Caribou County GIS department
Cooperators: Caribou County Emergency Services, U.S. Forest Service, Idaho Department of Lands, Bureau of Land Management, Caribou County Volunteer Fire Departments, Fort Hall Fire Department
Priority: Medium
Cost: \$10,100 - Trimble Recon Compact PC units with ArcPad (mobile GIS) as the map viewer/editor, and Holux GPS (submeter accuracy) (4 units with software at \$2,525 per unit)
Comments: The system is designed to take drops, subzero and extreme temperatures and it can be submersed into water. Ideal for fire applications. All data is stored on compact flash cards to make data dissemination very easy.

Existing Mitigation Programs and Resources

Existing mitigation activities include current mitigation programs and activities that are being implemented by county, state and federal agencies within Caribou County.

Local Programs

Caribou County residents are served by a variety of local fire districts and departments as well as by IDL, U.S. Forest Service and BLM. A countywide needs assessment of the various Volunteer and Rural Departments has been coordinated by the Bear River RC&D for Caribou County departments.

Fire personnel throughout the county have taken the lead in providing many useful and educational services to Caribou County residents, such as:

- Presenting fire safety education to school, church and civic groups;
- Coordinating educational programs with other agencies;
- Participating in or sponsoring local community events that focus on fire information and prevention.

County Codes

Zoning Ordinance of Caribou County, adopted June 9, 2003, established standards, conditions of design and construction for:

- Roads
- Land use
- Structure density
- Uses and structures, and
- Providing for variance.

State (IDL) Programs

The Idaho Department of Lands:

- Provides for education to property owners about fire hazards in forestland-urban interface areas.
- Manages the Hazardous Fuels Reduction Program to assist landowners or counties with grant funds for reduction of hazardous fuels.
- Manages the Forest Stewardship program, which assists landowners in forest and fire planning.
- Provides suppression training and resources as requested.
- Declares fire closures when wildfire danger ratings and conditions require.

Federal Programs

The role of the federal land managing agencies in Caribou County is focused on reducing fuel hazards on the lands they administer. They also provide prevention and education programs, provide technical and financial assistance and develop agreements and partnerships with other agencies and private stakeholders in an effort to provide for safer communities within the wildlands. Some of the programs provide grants to rural fire

districts within the county, which has enhanced the current operations, and will continue to do so within the foreseeable future.

Fire Suppression Assistance Grants may be provided to a state with an approved hazard mitigation plan. These grants are provided to protect life and improved property. The grant may include funds for training, equipment, supplies, and personnel.

The BLM proposes to selectively reduce hazardous fuel accumulations and associated fire hazards and improve forest health within approximately 14,000 acres of BLM administered land and 400 acres of State land located northwest of Soda Springs, Idaho. Commercial and non-commercial harvest and/or stewardship contracting may be utilized throughout the project area. In addition to the Soda Hills fuel reduction project, the BLM is also proposing fuel reduction activities in the Petticoat Peak and Fish Creek areas of western side of Caribou County. Maps and descriptions of all three fuel reduction projects can be obtained from the Pocatello Field Office of the Bureau of Land Management at 4350 Cliffs Drive, Pocatello, Idaho 83204. The U.S. Forest Service may also propose fuel reduction projects within Caribou County, however, specific projects have not been identified at the time this plan was prepared.

National Wildland/Urban Interface Fire Protection Program

Federal agencies can use the National Wildland/Urban Interface Fire Protection Program to focus on wildland/urban interface fire protection issues and actions. The Western Governors' Association (WGA) uses this program to involve state agencies, as well as local and private stakeholders.

Prescribed Burning/Mechanical/Biological Treatment

Within Caribou County, the inclusion of cropland in the Conservation Reserve Program (CRP), coupled with historical fire exclusion has resulted in a backlog of fuel accumulation. As a result, new ignitions can move more quickly and intensely. Prescribed burning and/or mechanical treatment are the most efficient methods to mitigate these fuels. Biological treatment (ungulate grazing) of some fuels has also been utilized with success in other areas of Idaho.

Firewise

Firewise is a program developed within the National Wildland/Urban Interface Fire Protection Program. It is administered through the National Wildfire Coordinating Group (NWCG), with the intention of educating planners and decision makers at the local level. Firewise offers online wildfire protection information and checklists, as well as listings of other publications, videos, and conferences. Future developments in Caribou County that would be planned and coordinated as a "firewise" community would likely be well received by potential home buyers.

Wildfire Mitigation Plan Maintenance

Proposed plan maintenance will be biennial, with a total review proposed every four years.

Biennial review of the plan and mitigation recommendations will be necessary as various projects or tasks are accomplished and areas at-risk decline. Biennial review will also be needed as County infrastructure needs change or are met. (Caribou County Fire Fighters, Caribou County Emergency Services, Caribou County Sheriff). A biennial review with the Caribou County Wildland Fire Planning team or the Local Emergency Planning Committee (LEPC) will allow State and Federal Land managers to initiate required planning procedures for identified mitigation projects and to update or modify mitigation recommendations.

A total review every four years (2008) is recommended as Caribou County infrastructure needs change, specifically: population increases, fuels reduction projects are completed, emergency services communication needs are met or increase, and priority risk from wildfire is mitigated. Either the Caribou County Wildland Fire Planning team or the Local Emergency Planning Committee (LEPC) shall conduct the review.

Continued Public Involvement

The continued involvement of the public for the Caribou County Wildfire Mitigation plan is needed to accomplish many of the mitigation recommendations. Publication of mitigation actions as they are addressed will occur in the *Caribou County Sun*, which is viewed by most residents and visitors and by publication of mitigation actions on the Caribou County web site.

Establishment of Emergency Action Plans for developments and communities will require continued involvement for the next two years. Incorporated areas of Caribou County will require action plan review prior to implementation.

Copies of the plan will be available at libraries within Caribou County for public access and review. Biennial review, and mitigation priority assessment by the Caribou County Wildland Fire Planning team will provide information to and create involvement of numerous residents of Caribou County. The biennial review by federal and state agencies will provide updates and progression of plan priorities to the general public within Caribou County, and should be published in the *Caribou County Sun* and on the Caribou County web site.